1) Which of the following statements is true?

A) Fire fighters are extraordinary people.
B) Fire fighters are ordinary people who consciously put themselves in extraordinary situations.
C) Fire fighters should be able to solve every problem in which they are called to respond to.
D) Volunteer fire fighters are not expected to calmly evaluate emergency and non emergency situations and work to bring them to a successful conclusion.

Answer -->  B


Although firefighters are extremely motivated individuals you have to remember that they cannot solve all problems that you will encounter.

The public must accept this reality and understand that not everything can be done at once.

2) Where was the first recorded major fire in the New World that occurred in 1608?

A) Jamestown.
B) New Amsterdam.
C) New York.
D) Boston.

Answer -->  A


3) When did fire fighting tools, equipment, and fire fighting methods begin to change in North America?

A) During the first quarter of the 18th Century.
B) During the Industrial Revolution beginning in the last quarter of the 18th Century.
C) During the mid 19th Century.
D) During the first quarter of the 20th Century.

Answer -->  B


4) Who was credited for organizing the first volunteer fire department?

A) George Washington.
B) Sam Adams.
C) Thomas Jefferson.
D) Benjamin Franklin.

Answer -->  D

5) In which American city was the first volunteer fire company organized?

A) New York.
B) Boston.
C) Philadelphia.
D) Charleston.

Answer --> C


The first paid fire company was formed in Boston in 1678.

6) In 1653, which city purchased it's first fire engine, even before forming the first ever paid fire company in 1678?

A) Boston.
B) New York.
C) Philadelphia.
D) Hartford.

Answer --> A


7) The first fire organization in North America was formed in 1647 in which American city.

A) Boston.
B) Philadelphia.
C) New Amsterdam.
D) Hartford.

Answer --> C


New Amsterdam was later known as New York.

8) Fire insurance companies adopted distinctive symbols and posted them on each property that they protected. These symbols were called –

A) Insurance marks.
B) Fire marks.
C) Maltese Crosses.
D) Coat of arms.

Answer --> B

9) The majority of the fire departments and firefighters in the USA and Canada are –

A) Career.
B) Part time.
C) Paid On Call.
D) Volunteer.

Answer --> D


10) Many of the early fraternal groups were made up of military veterans and these organizations adopted the military's rank structure. Most modern day fire departments now use different designations, except for which of the following ranks?

A) Privates and corporals.
B) Sergeants and lieutenants.
C) Lieutenants and captains.
D) Captains and majors.

Answer --> C


11) Firefighters who receive reimbursement for each call they attend are known as –

A) Career.
B) Part time.
C) Paid On Call.
D) Volunteer.

Answer --> C


12) In the fire service which of the following would best characterize the statement, "obedience to the unenforceable"?

A) Integrity.
B) Moral character.
C) Pride.
D) Work ethic.

Answer --> A


Doing the right thing simply because its right. Integrity is when you do the right thing even when no one else is watching.
13) Which of the following would best characterize truthfulness and honesty?

A) Honorableness.
B) Moral character.
C) Pride.
D) Work ethic.

Answer -->  B


14) In what year was the National Fire Protection Association NFPA formed?

A) 1896.
B) 1900.
C) 1924.
D) 1936.

Answer -->  A


15) Doing what needs to be done without being asked. Doing a job without complaining. Doing a job completely, and doing it to the best of your ability would be characterized by which of the following?

A) Honorableness.
B) Moral character.
C) Pride.
D) Work ethic.

Answer -->  D


16) The very first standard published by NFPA was –

A) NFPA 1.
B) NFPA 13.
C) NFPA 100.
D) NFPA 101.

Answer -->  B


NFPA 13 regulated the design and installation of fire protection sprinkler systems and structures.
17) The most basic mission of the fire service is to –
A) Extinguish fires.
B) Respond to all emergencies.
C) Investigate fires.
D) Save lives, property, and protect the environment.

Answer --> D


18) Which of the following is an obsolete term for resistance to fire?
A) Fire retardant.
B) Fire resistant.
C) Fireproof.
D) Burn proof.

Answer --> C

The term is inappropriate because all materials except water will burn. This term has been replaced by terms such as fire resistive or fire resistant.

19) Hardware mounted on exit doors in public buildings that are locked from the inside that enable doors to be opened when pressure is applied to them is known as –
A) Safety bar.
B) Safety hardware.
C) Egress hardware.
D) Panic hardware.

Answer --> D


20) Which of the following fires claimed the most lives?
A) Iroquois Theater Fire in Chicago in 1903.
B) Coconut Grove Nightclub Fire in Boston in 1942.
C) Station Nightclub Fire in West Warwick Rhode Island in 2003.
D) Ringling Brothers and Barnum & Bailey Circus Fire in Hartford in 1944.

Answer --> A


Iroquois Theater Fire 1903 – 602 dead.
Coconut Grove Nightclub Fire 1942 – 492 dead.
Station Nightclub Fire 2003 – 100 dead.
Ringling Brothers Fire 1944 – 168 dead.
21) The ability of two or more systems or components to exchange information and use the information that has been exchanged is known as –

A) Multitasking.
B) Cross-communication.
C) Interoperability.
D) Interface.

Answer --> C


22) The National Commission on Fire Prevention and Control was authorized by –


Answer --> D


The purpose of the commission was to determine how to reduce fire loss in America.

23) On average, approximately how many firefighters lose their lives in the line of duty each year in America?

A) 50.
B) 75.
C) 86.
D) 100.

Answer --> D


24) On average, how many firefighters each year are injured while performing both emergency and nonemergency duties?

A) 20000.
B) 45000.
C) 80000.
D) 100000.

Answer --> C

25) Which of the following are organizational principles that must be present, in order to operate effectively as a team member?

(1) Unity of command  (2) Span of control  (3) Division of labor  (4) Dissemination of knowledge  
(5) Discipline

A) 1, 3.  
B) 2, 3, 4.  
C) 1, 2, 3, 5.  
D) All the above.

Answer --- C


26) The organization principle, Unity of Command, essentially states that –

A) All officers on the fire ground should agree with each other on any tactical fire fighting operation before it is performed.  
B) All firefighters should report to any officer on the fire ground.  
C) Each firefighter should report to only one supervisor.  
D) All firefighters should report directly to the chief of the department.

Answer --- C


However, moving up through the chain of command, all personnel ultimately report to the Fire Chief.

27) ____ means that any fire officer can effectively supervise or manage only a certain number of individuals on the fire ground.

A) Span of command.  
B) Span of control.  
C) Span of direction.  
D) Span of leadership.

Answer --- B


28) As a rule of thumb, an officer can directly supervise ____ firefighters effectively.

A) 1  
B) 2  
C) 3 – 7.  
D) 7 – 10.

Answer --- C


The actual number varies with the situation. Five firefighters is considered to be the optimum.
29) Division of labor in the fire service is necessary for all of the following reasons except –

A) To assign responsibility.
B) To prevent an unbalanced workload.
C) To prevent duplication of effort.
D) To make specific and clear-cut assignments.

Answer --> B


Division of labor is the process of dividing large jobs into smaller jobs in order to make them more manageable.

30) Setting the limits or boundaries for expected performance and enforcing them would be considered which of the following?

A) Discipline.
B) Rules.
C) SOPs.
D) Regulations.

Answer --> A


31) What is considered a negative connotation for the term discipline as it relates to the fire service?

A) Self-realization.
B) Suspension.
C) Termination.
D) Punishment.

Answer --> D


32) The highest and most positive form of discipline is –

A) Positive discipline.
B) Preventive discipline.
C) Corrective discipline.
D) Self-discipline.

Answer --> D

33) The main purpose of discipline is to –

A) Punish.
B) Educate.
C) Provide direction.
D) Correct inappropriate behavior.

Answer --> B


34) A fire company which deploys hoselines for fire attack and exposure protection is known as a –

A) Hazardous materials company.
B) Engine company.
C) Truck company.
D) Rescue company.

Answer --> B


35) Fire companies responsible for extinguishing wildland fires and also protecting structures in the wildland/urban interface are known as –

A) Brush companies.
B) Engine companies.
C) Truck companies.
D) Hazardous materials companies.

Answer --> A


36) A ____ provides emergency medical care to patients and may also transport them to a medical facility are –

A) Rescue squad.
B) Rescue company.
C) Emergency medical company.
D) Hazardous materials company.

Answer --> C


Also called an ambulance company.
37) Which of the following is responsible for searching for and removing victims from areas of endanger or entrapment?

A) Rescue squad/company.  
B) Emergency medical company.  
C) Hazardous materials company.  
D) Truck company.

Answer -->  A


38) Which company would be responsible for mitigating a chemical spill?

A) Truck company.  
B) Rescue company.  
C) Hazardous materials company.  
D) Emergency medical company.

Answer -->  C


39) Which company would be responsible for performing forcible entry, search and rescue, ventilation and overhaul, utilities control, and would provide access to the upper levels of a structure?

A) Truck company.  
B) Rescue company.  
C) Special rescue company.  
D) Emergency medical company.

Answer -->  A


40) A firefighter is an individual who must meet all the following criteria except –

A) Be a knowledgeable expert at all forms of fire fighting.  
B) Meet the requirements of the NFPA Standard 1001.  
C) Satisfy the age requirement set by the AHJ.  
D) Meet the medical requirements set forth in NFPA 1582.

Answer -->  A

CodeRQ

Also meet the job related physical fitness requirements and minimum educational requirements set forth by the Authority Having Jurisdiction (AHJ).
41) Those who assist in emergency operations with traffic control, crowd control, and scene security are called –

A) Information Systems Personnel.
B) Fire Department Safety Officers.
C) Fire Department Officers.
D) Fire Police Personnel.

Answer --> D


42) An individual who informs the public about fire hazards, fire causes, precautions, and actions taken during a fire is called –

A) Fire Prevention Officer/Inspector.
B) Fire and Arson Investigator.
C) Fire and Life Safety Educator.
D) Fire Protection Engineer/Specialist.

Answer --> C


43) An individual who acts as a consultant to the upper administration of the fire department in the areas of department operations, and fire prevention is known as –

A) Fire Prevention Officer/Inspector.
B) Fire and Arson Investigator.
C) Fire and Life Safety Educator.
D) Fire Protection Engineer/Specialist.

Answer --> D


They also check architectural and fire protection systems plans for proposed buildings to ensure compliance with local fire and life safety codes and ordinances.

44) An individual who inspects a variety of occupancies to ensure code compliance and conducts technical and supervisory work in fire prevention is known as –

A) Fire Prevention Officer/Inspector.
B) Fire and Arson Investigator.
C) Fire and Life Safety Educator.
D) Fire Protection Engineer/Specialist.

Answer --> A

45) One who conducts the investigation of the fire area and makes analytical judgements based on the remains at the fire scene to determine the origin and cause of a fire is known as –

A) Fire Prevention Officer/Inspector.
B) Fire and Arson Investigator.
C) Fire and Life Safety Educator.
D) Fire Protection Engineer/Specialist.

Answer -->  B


46) One who oversees a fire department’s occupational safety and health program is known as –

A) Fire department incident safety officer.
B) Fire department officer.
C) Fire apparatus driver/operator.
D) Fire department health and safety officer.

Answer -->  D


Abbreviated HSO.

47) One who monitors operational safety during emergency incidents is known as –

A) Fire department incident safety officer.
B) Fire department officer.
C) Fire apparatus driver/operator.
D) Fire department health and safety officer.

Answer -->  A


48) One who manages the collection, entry, storage, retrieval, and dissemination of electronic databases such as fire reporting is known as –

A) Informational systems personnel.
B) Telecommunicator.
C) Computer officer.
D) System administrator.

Answer -->  A

49) Those whose sustain a patient’s life until more competent medical personnel arrive are known as –

A) First Aid Firefighters.
B) Red Cross workers.
C) Bystanders.
D) Emergency Medical Responders.

Answer -->  D


50) Those able to provide advanced life support (ALS) to a patient are called –

A) ER Medics.
B) EMTs.
C) Paramedics.
D) Medical Officers.

Answer -->  C


51) Who of the following is responsible for administering all fire department training activities?

(1) Training Officer  (2) Chief of Training  (3) Drill-Master  (4) Instructor

A) 1
B) 1, 2.
C) 1, 2, 3.
D) All the above.

Answer -->  B


CodeRQ

Answer Change: Drillmaster was dropped as a term.

The instructor delivers training courses to the other members of the department (NFPA 1041, Standard for Fire Service Instructor Professional Qualifications).
52) ____ is a guide to decision making within an organization.

A) Policy.
B) Rule.
C) Procedure.
D) Law.

Answer --> A


Policies are determined by top management, then distributed two lower ranks to be implemented. They set the boundaries and establish standards of conduct that an organization expects its members to abide by.

53) A step-by-step written plan to help an organization to ensure that it consistently approaches a task in the correct way, in order to accomplish a specific objective is known as a –

A) Policy.
B) Rule.
C) Procedure.
D) Law.

Answer --> C


And example would be a step-by-step procedure on how to ventilate a roof.

54) What is the difference between a directive and an order?

A) Orders are based on policy and procedure, while directives are not.
B) Directives are based on policy and procedures, while orders are not.
C) Orders are subjective, while directives are objective.
D) There is no clear difference between a directive and an order.

Answer --> D


Answer Change: Old answer was A.
According to IFSTA, the terms orders and directives basically mean the same thing, but exact definitions may vary between departments.
55) A predetermined plan used by fire departments for nearly every conceivable situation is called –

A) Standard operating procedure (SOPs).
B) Standing orders.
C) Directives.
D) Protocols.

Answer --> A


They are rules for how personnel should perform routine functions or emergency operations. Procedures are typically written down so that all firefighters can become familiar with them.

56) The National Fallen Firefighters Foundation hosted the Firefighter Life Safety Summit in 2004, which resulted in the Everyone Goes Home program and the 16 Firefighter Life Safety Initiatives intended to reduce line of duty deaths by ___ by the year 2014.

A) 10%.
B) 25%.
C) 50%.
D) 75%.

Answer --> C


57) During natural disasters, which organization is usually the first to be called and the first to arrive in many communities in order to mitigate and address the potential hazards resulting from any type of natural disaster?

A) FEMA,
C) The fire department.
D) The police department.

Answer --> C


58) The specialized or technical language of a trade, profession or similar group is known as

A) Jargon.
B) Newspeak.
C) Vernacular.
D) Dialect.

Answer --> A

59) The fire service is often referred to as a paramilitary organization because of its organizational characteristics that closely resemble the military. These characteristics would include which of the following?

A) A common structure, including the chain of command.
B) Ranks to define positions within the structure along with uniforms, badges and symbols of rank.
C) An emphasis on teamwork, discipline, and following orders.
D) All the above.

Answer --> D


60) All officers should meet the requirements specified in –

A) NFPA 1001.
B) NFPA 1500.
C) NFPA 1021.
D) NFPA 1501.

Answer --> C


NFPA 1021 is the Standard for Fire Officer Professional Qualifications.

61) Which of the following cultural strengths would describe that part of the fire service that gives a firefighter a feeling of self-respect and self-worth?

A) Loyalty.
B) Courage.
C) Respect.
D) Pride.

Answer --> D


Firefighters demonstrate this by taking pride in their personal appearance, displaying fire service symbols on personal vehicles, wearing nonuniform apparel with fire department name or Maltese Cross and collecting fire service memorabilia.
62) Which of the following cultural strengths would describe an attitude of esteem towards their peers, superiors, and fellow citizens?

A) Loyalty.
B) Courage.
C) Respect.
D) Pride.

Answer --> C


This type of attitude, as well as the public-service firefighters provide, has always led the public to respect the work of the fire service and the firefighters that work in it.

63) Of all the personal characteristics firefighters have, which of the following is the most obvious?

A) Loyalty.
B) Courage.
C) Respect.
D) Compassion.

Answer --> B


Courage is the ability to confront fear, pain, danger, or uncertainty.

64) Which of the following cultural strengths would prompt firefighters to risk their own lives to save a trapped or missing firefighter?

A) Loyalty.
B) Courage.
C) Respect.
D) Compassion.

Answer --> A


Firefighters are faithfully loyal to the fire service, their department, and their coworkers.
65) Which of the following cultural strengths would describe a firefighter's feelings of care about the citizens they serve, their fellow firefighters, and their families?

A) Loyalty.
B) Courage.
C) Respect.
D) Compassion.

Answer -->  D

66) The term used in codes and standards to identify the legal entity, such as a building or fire official, that has the statutory authority to enforce a code into approve or require equipment is known as –

A) Municipality.
B) Authority Having Jurisdiction.
C) Fire District.
D) Metropolis.

Answer -->  B

67) Providing a coordinated approach to a wide variety of incidents; all responders use a similar, coordinated approach with a common set of authorities, protections, and resources is known as –

A) Multitask Concept.
B) Synchronize Concept.
C) All-Hazard Concept.
D) Systematic Concept.

Answer -->  C
68) The All-Hazard Concept would include all of the following elements except –

A) Lobbying local, state, and federal government for funds.
B) Emergency medical services.
C) Hazardous materials mitigation.
D) Emergency management services.

Answer --> A


Also included:
Fire suppression protection.
Technical rescue services.
Airport and or seaport protection.
Fire prevention services and public education.
Community risk reduction.
Fire caused determination.

69) Fire departments that are staffed with a mixture of career and volunteer firefighters are commonly called –

A) Mixed departments.
B) Combination departments.
C) Compound departments.
D) Composite departments.

Answer --> B


70) When fire departments refer to external customers, who are they referring to?

A) Citizens of the service area protected by the organization.
B) EMS patients who are charged through billing services.
C) Victims of interstate highway crashes that live outside the jurisdiction of the department.
D) Municipalities outside the jurisdiction of the department who benefit from mutual aid responses.

Answer --> A

71) The term used to describe personnel who provide emergency services to external customers is known as –

A) Internal customers.
B) Staff/Support functions.
C) Line functions.
D) Combination customers.

Answer --> C


72) The term used to describe personnel who provide administrative and logistical support to line units is known as –

A) Internal customers.
B) Staff/Support functions.
C) Line functions.
D) Combination customers.

Answer --> B


73) Who would you consider to be Internal Customers?

A) Employees and members of an organization.
B) Members of the public who live within the jurisdiction of a specific engine company or truck company.
C) Those in the community who pay taxes in their fire district.
D) All the above.

Answer --> A


74) The basic unit of firefighting operations is called the –

A) Division.
B) Battalion.
C) Company.
D) Department.

Answer --> C

75) The fire department company that performs technical rescues including rapid intervention for the rescue of firefighters is known as –

A) Rescue squad.
B) Rescue company.
C) Hazardous materials company.
D) Special rescue company.

Answer --> D


76) Which of the following would be considered duties performed by a firefighter trained at the Firefighter II level?

A) Performing overhaul activities at a fire scene.
B) Coordinating an interior attack line at a structure fire.
C) Attacking a vehicle fire.
D) Performing horizontal and vertical ventilation on a structure fire as part of a team.

Answer --> B


77) A standardized approach to incident management that facilitates interaction between coordinating agencies that are adaptable to incidents of any size or type is known as –

A) Incident command system.
B) Incident management system.
C) Targeted preplanning.
D) Incident mediation system.

Answer --> A


78) Certification for hazardous material technician is based on which NFPA standard, that is the Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents?

A) NFPA 475.
B) NFPA 471.
C) NFPA 472.
D) NFPA 473.

Answer --> C

79) Medical personnel who are trained to provide basic emergency medical care and transportation for critical or emergent patients are known as –

A) EMRs.
B) EMTs.
C) Paramedics.
D) Advanced EMTs.

Answer -->  B


80) Medical personnel who are trained to provide basic and limited advanced emergency medical care and transportation for critical or emergent patients are known as –

A) EMRs.
B) EMTs.
C) Paramedics.
D) Advanced EMTs.

Answer -->  D


Abbreviated AEMT.

81) Uniform or nonuniform personnel who ensure code compliance by reviewing architectural plans and fire protection system plans, for both new construction and renovations are known as –

A) Fire marshals.
B) Fire in life safety educators.
C) Fire protection engineers/specialists.
D) Plan examiners.

Answer -->  D


82) Technicians that maintain municipal fire alarm systems based on the requirements of NFPA 72, National Fire Alarm and Signaling Code are known as –

A) Fire alarm maintenance personnel.
B) Telecommunicators.
C) Dispatchers.
D) Information systems personnel.

Answer -->  A

83) Personnel who receive emergency and nonemergency phone calls, dispatch units, establish and maintain communication links to in service companies, and complete incident reports are known as –

A) Dispatchers.
B) Information systems personnel
C) Telecommunicators.
D) Clerical staff.

Answer --> C


The term telecommunicators has replaced dispatchers.

84) Uniformed personnel who train members of the department or other students and are certified to the Firefighter I requirements of NFPA 1041 Standard for Fire Service Instructor Professional Qualifications are known as –

A) Instructors.
B) Training officers.
C) Drillmasters.
D) Chief of training.

Answer --> A


85) The formal line of authority, responsibility, and communication within an organization is known as –

A) Standard operating procedures.
B) Chain of command.
C) Standard operating guidelines.
D) Command structure.

Answer --> B


86) As a firefighter, it is your responsibility to learn and adhere to your department's regulations. To ensure that members have access to these regulations, so they can fully understand them, and be able to comply, organizations should do which of the following –

A) Regulations should be distributed to them in written or electronic format.
B) Regulations should be communicated to them verbally.
C) Regulations should be posted in a conspicuous place in the facilities.
D) All the above.

Answer --> D

87) A set of principles, protocols, or procedures that explain how to do something or provide a set of minimum standards to be followed is called a –

A) Code.
B) Policy.
C) Standard.
D) Guide.

Answer --> C

88) A collection of rules and regulations that has been enacted by law in a particular jurisdiction is known as a –

A) Code.
B) Policy.
C) Statute.
D) Standard.

Answer --> A

89) Organizations that provide pre-hospital patient care and/or transportation to a medical facility is called –

A) First Responders.
B) Mobile aid stations.
C) Emergency medical services (EMS).
D) Mobile medical clinics.

Answer --> C

90) What is the NFPA Standard on Health-Related Fitness Programs for Fire Department Members?

A) NFPA 1001.
B) NFPA 1500.
C) NFPA 1823.
D) NFPA 1583.

Answer --> D
91) Approximately how many firefighter injuries are reported in the USA each year?

A) 1000 to 4000.
B) 5000 to 9000.
C) 10,000 to 24,000.
D) 72,000 to 83,000.

Answer --> D

CodeRQ

Answer change: Old answer was 100,000. New answer is based on statistics between 2001 and 2010.

92) Many firefighter injuries can be prevented through –

A) Effective training.
B) Maintain company discipline and accountability.
C) Following established safety–related SOPs.
D) All the above.

Answer --> D


93) The USFA reported serious firefighter injuries for 2010, and found that __ of these injuries occurred on the fireground.

A) 35%.
B) 40%.
C) 45%.
D) 64%.

Answer --> C

CodeRQ

Answer change from last version. Old answer was 52%.

94) Over the last decade approximately how many firefighters die each year in the USA in the line of duty?

A) 50.
B) 75.
C) 85.
D) 100.

Answer --> D


However in 2010, the NFPA recorded 72 on–duty firefighter deaths in the United States, which represented the lowest figure since NFPA began collecting data in 1977.
95) The leading cause of all firefighter deaths is due to –

A) Smoke inhalation.
B) Falls.
C) Stress and overexertion.
D) Accidents involving apparatus, or firefighter personal vehicles, going to and returning from calls.

Answer --> C

CodeRQ

This category includes deaths from heart attacks and strokes.

96) Most firefighter injuries are –

A) Inevitable.
B) A direct result of preventable accidents.
C) Taken in stride as part of the job.
D) A symptom of the weaknesses in the national fire fighting curriculum.

Answer --> B


Firefighters should be too smart and too professional to take unnecessary risks.

97) In 2010, approximately what percentage of firefighter deaths involve volunteers?

A) 25%.
B) 52%.
C) 62%.
D) 86%.

Answer --> C

CodeRQ

This should be no great surprise since the vast majority of firefighters in this country are volunteer. There were 44 volunteer firefighter deaths in 2010, 25 career firefighters, 2 state land management employees and 1 prison inmate.
98) Sharp or severe; having a rapid onset and short duration best describes which of the following?

A) Acute.  
B) Chronic.  
C) Sudden.  
D) Cutting.  

Answer -->  A


99) What is the NFPA Standard on Fire Department Occupational Safety and Health Program?

A) NFPA  1002.  
B) NFPA 1500.  
C) NFPA  1600.  
D) NFPA 1221.  

Answer -->  B


100) Cardiovascular diseases account for what percentage of firefighter fatalities?

A) 20%.  
B) 35%.  
C) 45%.  
D) 60%.  

Answer -->  C


101) Which of the following would be considered work related causes for cardiovascular disease in firefighters?

A) Exposure to smoke and chemicals.  
B) Heat stress from fires in high temperatures.  
C) Psychological stress and long, irregular work hours.  
D) All the above.  

Answer -->  D

102) To make less harsh or intense, best describes which of the following?

A) Alleviate.
B) Mitigate.
C) Abate.
D) Temper.

Answer --> B


103) A condition, substance, or device that can directly caused injury or loss is known as –

A) Hazard.
B) Danger.
C) Threat.
D) Risk.

Answer --> A


104) A 2010 study found that up to ___ of firefighters nationwide or overweight.

A) 25%.
B) 30%.
C) 35%.
D) 40%.

Answer --> D


This is 6% above the national average of the general population.

105) A written plan that identifies and analyzes the exposure to hazards and includes selection of appropriate risk management techniques, and monitoring of the results of those risk management techniques is referred to as a –

A) Safety protocol.
B) Safety program.
C) Risk management plan.
D) Safety management plan.

Answer --> C

106) An atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user, and not certified for fire fighting operations is called –

A) Self-contained breathing apparatus (SCBA).  
B) Supplied-Air Respirator (SAR).  
C) Remote-Air Respirator (RAP).  
D) Forward-Air Respirator (FAR).

Answer -->  B


107) What is the term used in the fire service for a rehabilitation station at a fire or other incident where personnel can rest, rehydrate, and recover from the stresses of the incident?

A) MASH.  
B) Triage.  
C) Aid station.  
D) Rehab.

Answer -->  D

It is the abbreviated term for rehabilitation.

108) Prior to 2007, what medical condition prevented firefighters from being hired as career firefighters in accordance with NFPA 1582?

A) Hypertension.  
B) Asthma.  
C) Diabetes.  
D) Allergies.

Answer -->  C


Since 2007, persons who are under a physician’s care and have control over their diabetes maybe hired as a firefighter and medical responder.

109) Any agent, condition or experience that causes stress is called a –

A) Stress agent.  
B) Stress force.  
C) Stress enabler.  
D) Stressor.

Answer -->  D

110) Which NFPA standard is considered the Life Safety Code?

A) NFPA 101.
B) NFPA 1250.
C) NFPA 1401.
D) NFPA 1561.

Answer --> A


111) Stress can cause which of the following physical symptoms?

A) Headache.
B) Nausea.
C) Weakness in the legs.
D) All the above.

Answer --> D


112) In 1970, the William-Streiger Occupational Safety And Health Act became federal law in the United States. What government agency was evolved as a result of this act?

A) Occupational Safety and Health Administration (OSHA).
B) Federal Rail Safety Administration (FRSA).
C) Highway Safety Administration (HSA).
D) Federal Safety Appliance Administration (FSAA).

Answer --> A


113) An established set of criteria by which tactical decisions can be made based on an assessment of the benefits to be gained compared to the risks involved is known as a –

A) National Safety Plan.
B) Local Safety Plan.
C) Risk Management Plan.
D) Risk Analysis Survey.

Answer --> C

114) Which United States fire department has implemented an exemplary risk management plan?

A) Phoenix (AZ) Fire Department.
B) New York FDNY.
C) Boston Fire Department.
D) Los Angeles Fire Department.

Answer --> A


115) All of the following situations would NOT warrant firefighters jeopardizing their safety except for –

A) When there is no possibility to save lives or property.
B) If the property is a high value occupancy.
C) When the building is abandoned or derelict.
D) If the occupancy is in the incipient phase of burning.

Answer --> D


It is assumed that if the occupancy is in the incipient phase of burning that the relative danger to firefighters would be rather low.

116) Which should be considered the highest fireground priority?

A) Having a viable preplan.
B) Protecting your life and the lives of your fellow firefighters.
C) Establishing a good water source early.
D) Ventilating the structure while attempting interior fire attack and rescue.

Answer --> B


117) Which would be considered first on a list of key behaviors firefighters should exhibit on the fireground?

A) Drive defensively.
B) Don't ever breathe smoke.
C) Think.
D) Keep the crew intact.

Answer --> C

118) All of the following would be considered main goals of a safety program except –

A) Preventing damage to a structure during salvage and overhaul.
B) Preventing human suffering, deaths, injuries, and exposures to hazardous atmospheres and contagious disease.
C) Preventing damage to or loss of equipment.
D) Reducing the incident and severity of accidents and hazardous exposures.

Answer -->  A

These would be the main goals of NFPA 1500.

119) Pathogenic microorganisms that are present in the human blood and can cause diseases in humans are called –

A) Pathogens.
B) Viruses.
C) Bloodborne Pathogens.
D) Bloodborne bacteria.

Answer -->  C


120) All of the following would be considered cognitive symptoms of stress except –

A) Moodiness.
B) Memory problems.
C) Poor judgment.
D) Anxious thoughts.

Answer -->  A

Moodiness would be considered an emotional symptom of stress.
Other cognitive symptoms would be inability to concentrate, dwelling on the negative, and constant worrying.

121) All of the following would be considered emotional symptoms of stress except –

A) Irritability or short temper.
B) Loss of sex drive.
C) Agitation, inability to relax.
D) Feeling overwhelmed.

Answer -->  B

Loss of sex drive would be considered a physical symptom of stress.
Other emotional symptoms would include moodiness, feeling lonely and isolated, depression or general unhappiness.
122) All the following would be considered physical symptoms of stress except for –

A) Sleeping too much or too little.
B) Nausea or dizziness.
C) Muscle tension, spasms or nervous tics.
D) Shortness of breath.

Answer --> A


Sleeping too much or too little would be considered behavioral symptoms of stress.
See page 53 for other physical symptoms of stress.

123) All the following would be considered behavioral symptoms of stress except for –

A) Being easily confused.
B) Procrastinating or neglecting responsibilities.
C) Isolating yourself from other people.
D) Butterflies in the stomach.

Answer --> D


Butterflies in the stomach would be considered a physical symptom of stress.
See page 53 for other behavioral symptoms of stress.

124) A program to help employees and their families would work or personal problems is known as –

A) Department benevolent program.
B) Employer assistance program.
C) Employee assistance program.
D) All the above.

Answer --> C


125) __ have statistically been proven to be the most expensive single type of accident in terms of worker's compensation.

A) Lung illnesses.
B) Knee injuries.
C) Back injuries.
D) Lacerations and abrasions.

Answer --> C

126) Firefighters should remember to bend their knees before lifting any object. All of the following will occur except –

A) The spine will be in a more comfortable position.
B) The load will be farther away from the fulcrum.
C) The powerful leg muscles will do most of the lifting.
D) The load will be lifted closer to the fulcrum.

Answer -->  B


127) Horseplay during training sessions –

A) Must not be allowed since it may lead to accidents and injuries.
B) Must be ignored since it is often inevitable.
C) May be encouraged occasionally to promote cooperation.
D) May be tolerated occasionally because it releases tension.

Answer -->  A


128) When is it permissible for a firefighter to ride on the tailboard of the apparatus?

A) When the apparatus is moving slower than 30 mph.
B) If there are no more jump seats available on the apparatus.
C) Only when going to a working structure fire.
D) Never.

Answer -->  D


Firefighters should never stand on or in a moving apparatus, with the exception of while loading hose as the apparatus moves slowly forward.

129) Which of the following is the NFPA Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting?

A) NFPA 1971.
B) NFPA 1975.
C) NFPA 1977.
D) NFPA 1403.

Answer -->  A

130) A training exercise that involves the use of an unconfined open flame or fire in a structure or other combustibles to provide a controlled burning environment is called a –

A) Live Fire Exercise.
B) Live Burn Exercise.
C) Controlled Burn Exercise.
D) A and B.

Answer --> D


131) The training structure specially designed to contain live fires for the purpose of fire-suppression training is called –

A) Burn Building.
B) Burn Barn.
C) Controlled Fire Structure (CFS).
D) Burn Structure.

Answer --> A


132) __ is the operation of fire service training or suppression covering one or several aspects of fire fighting.

A) Session.
B) Evolution.
C) Exercise.
D) All the above.

Answer --> B


133) The Standard on Live Fire Training Evolutions is –

A) NFPA 1400.
B) NFPA 1500.
C) NFPA 1451.
D) NFPA 1403.

Answer --> D

134) Which of the following is the Standard on Fire Department Infection Control Program?
A) NFPA 1581.  
B) NFPA 1582.  
C) NFPA 1583.  
D) NFPA 1584.  

Answer --> A


135) The most comprehensive NFPA standard dealing with firefighter safety and health is –
A) NFPA 1581.  
B) NFPA 1584.  
C) NFPA 1500.  
D) NFPA 1582.  

Answer --> C


NFPA 1500 is the Standard on Fire Department Occupational Safety and Health Program.

136) NFPA 1500 requires fire departments to establish a program to counsel personnel involved in highly stressful incidents. What is this program call?
A) Diffusing management.  
B) Critical incident stress management.  
C) Wellness management.  
D) Health management.  

Answer --> B


137) In a structure fire, which of the following would be the first "Tactical Priority"?
A) Fire control (incident stabilization).  
B) Loss control (property conservation).  
C) Rescue (life safety).  
D) Firefighter safety (life safety).  

Answer --> D

All Chapters

138) OSHA requirements only apply to which of the following groups?

A) Federal employees.
B) Private sector employees.
C) All firefighters in the United States.
D) A and B only.

Answer -->  D


However 25 U.S. states and 2 territories operate Occupational Health & Safety plans that provide equivalent protection under federal OSHA standards.

139) The level of care that all persons should receive is known as the –

A) Standard of response.
B) Code of care.
C) Standard of care.
D) Code of ethics.

Answer -->  C


Care that does not meet this standard is considered inadequate.

140) The National Fallen Firefighters Foundation is committed to helping the US Fire Administration meet its stated goal of reducing firefighter fatalities by ___ within five years.

A) 25%.
B) 30%.
C) 40%.
D) 50%.

Answer -->  A


141) The National Fallen Firefighters Foundation is committed to helping the US Fire Administration meet its stated goal of reducing firefighter fatalities by ___ within ten years.

A) 35%.
B) 40%.
C) 50%.
D) 65%.

Answer -->  C

142) The National Fallen Firefighters Foundation believes that adoption of 16 Firefighter Life Safety Initiatives is a vital step in meeting its goal of reducing firefighter deaths. Which of the following would be considered the first initiative?

A) Define and advocate the need for a cultural change relating to safety; incorporating leadership, management, supervision, accountability and personal responsibility.
B) All firefighters must be empowered to stop unsafe practices.
C) Create a national research agenda and data collection system that relates to the initiatives.
D) Thoroughly investigate all firefighter fatalities, injuries, and near misses.

Answer --> A


143) All of the following statements regarding operating at highway incidents is true except –

A) Position fire apparatus to block oncoming traffic.
B) Turn front wheels of blocking apparatus away from the emergency.
C) Keep all apparatus lights on to alert oncoming traffic of the emergency.
D) Never walk with your back to the traffic.

Answer --> C


Turn off all forward facing lights, including headlights.
Minimize flashing lights on the vehicle's sides and rear.
Turn off lights the face approaching traffic, to avoid blinding or distracting drivers.
Turn off all headlights, unless they are being used to illuminate the work area or warn motorists that the vehicle is in and unexpected location.

144) You are working at a motor vehicle accident involving two vehicles on a four lane interstate highway. The accident has occurred in the extreme left hand lane. What lanes should you close in order to safely operate at this scene?

A) Only the lane the accident has occurred in.
B) The lane the accident occurred in, plus the next lane over.
C) The lane the accident occurred in, plus the next two lanes over.
D) Close the entire highway and have the State Police detour traffic around the accident.

Answer --> B


At least one lane should be closed, in some cases two. But one is the minimum.
145) Crowd control at an emergency scene is usually the responsibility of –

A) Law enforcement agencies.
B) Firefighters working at the scene.
C) The incident commander.
D) Safety officers present at the scene.

Answer --> A


The key to this question, is "usually." If police officers are not available, the responsibility may be handed to firefighters. The incident commander is ultimately responsible for the security of the scene.

146) In many cases the best way to maintain scene security is to –

A) Establish control zones.
B) Block all streets leading to the scene.
C) Have an abundance of uniformed police officers on–scene.
D) All the above.

Answer --> A


147) The control zone closest to the incident is called the –

A) Hazard area.
B) Hot zone.
C) Warm zone.
D) Cold zone.

Answer --> B


148) The Phoenix Arizona Fire Department has implemented an exemplary risk management plan that helps officers make reliable decisions during emergency responses. Which of the following would not be considered an example of one of their plan elements?

A) Each emergency response is begun with the assumption that responders can protect lives and property.
B) Responders will risk their lives a lot, if necessary, to save savable lives.
C) Responders will risk their lives a little, and in a calculated manner, to save savable property.
D) Responders will risk their lives a little to recover victims that have already been lost.

Answer --> D


Responders will not risk their lives at all to recover victims and property that have already been lost.
149) Before entering a hazard zone, firefighters should give their tags or passports to the –

A) Company Officer they arrived with.
B) Incident Commander.
C) Designated Accountability Officer (AO).
D) Ranking fire officer at the scene.

Answer -->  C


150) The personnel accountability system in which entry and expected time of exit are based on the pressure in the lowest-reading SCBA in the team is referred to as the –

A) Tag System.
B) SCBA Tag System.
C) Apparatus Tag System.
D) Cascade Tag System.

Answer -->  B


151) Your knowledge of a situation or environment around you during an emergency incident is known as –

A) Environmental awareness.
B) Situational awareness.
C) Tunnel vision.
D) Topography.

Answer -->  B


152) The international distress signal broadcast by voice is –

A) SOS.
B) Mayday.
C) Three blasts of the apparatus air horns.
D) Firefighter down.

Answer -->  B

153) Which statement regarding “Personnel Accountability” is NOT true?

A) The system should be standardized and used at every incident.
B) The system should only account for fire department personnel who respond to the scene in fire department apparatus.
C) An accountability system identifies and tracks all personnel working at an incident.
D) All personnel must be familiar with the system and participate when operating at an emergency incident.

Answer -->  B

Personnel accountability should track all persons working at the scene.

154) Long-term and reoccurring best describes which of the following?

A) Acute.
B) Chronic.
C) Sudden.
D) Cutting.

Answer -->  B


155) Which of the following would be considered part of the simplified Phoenix model?

A) Risk a lot to save a lot.
B) Risk a little to save a little.
C) Risk nothing to save nothing.
D) All the above.

Answer -->  D


156) In most states the CDL (commercial drivers license) is required to operate all but which of the following vehicles?

A) Fuel truck.
B) Passenger bus.
C) Fire apparatus in ambulance.
D) Tractor-trailer truck.

Answer -->  C

All Chapters

157) Which of the following would not be considered one of the basic causes of fire apparatus collisions?

A) Excessive speed by the fire apparatus driver/operator.
B) Age of the driver/operator.
C) Improper backing of the apparatus.
D) Reckless driving by the public.

Answer -->  B


Also included would be:
Fire apparatus design or maintenance.
Lack of driving skills and experience by the fire apparatus driver/operator.

158) According to the USFA, what is the second leading cause of firefighter fatalities?

A) Smoke inhalation or direct flame contact.
B) Falls.
C) Contact with electrical utilities.
D) Accidents that occur while responding to and returning from emergencies.

Answer -->  D


159) What percentage of fatal crashes involving firefighters can be attributed to firefighters operating their private vehicles?

A) 25%.
B) 35%.
C) 45%.
D) 55%.

Answer -->  A


160) Which of the following statements regarding operating fire apparatus and department vehicles is not true?

A) Slowdown. Speed is less important than arriving safely.
B) Take the fastest route to an emergency scene.
C) Use a low gear when starting from a dead stop.
D) Keep all the wheels on the road surface at all times.

Answer -->  B


The correct answer should be – Take the safest route to an emergency, and avoid dangerous routes.
161) An intermediate partial bulkhead that reduces the surge effect in a partially loaded liquid tank is known as a –

A) Baffle.
B) Piling.
C) Abutment.
D) Breast wall.

Answer --> A


162) No one should ever be allowed to ride on the exterior of the apparatus with the exception of hose loading operations. When this is done, the apparatus must be driven forward and be driven no faster than –

A) 5 mph.
B) 7 mph.
C) 8 mph.
D) 10 mph.

Answer --> A


163) Handtools are also known as –

A) Stationary tools.
B) Manual tools.
C) Unpowered tools.
D) All the above.

Answer --> C

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164) All of the following would be considered unpowered tools with the exception of –

A) Pipe poles.
B) Picks.
C) Pry bars.
D) Spreaders.

Answer --> D

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Spreaders would be considered hydraulic extrication tools.
165) According to an NFPA study, how many firefighters died in training related incidents between 1996 and 2005?

A) 45  
B) 68  
C) 100  
D) 123  

Answer --> C


166) Operation of fire and emergency services training covering one or several aspects of firefighting is known as –

A) A training evolution.  
B) A training session.  
C) A practical training evolution.  
D) A and C.  

Answer --> D


167) All the following would be considered tactical objectives of the National Incident Management System except for –

A) Operate as part of the team.  
B) Report to the closest supervisor or officer in your area or division.  
C) Remain constantly aware of your situation.  
D) Advise your supervisor of any changes in the situation.  

Answer --> B


168) Which of the following statements in regards to positioning apparatus on a roadway at an emergency scene is correct?

A) Apparatus should be parked as far off the roadway as possible to avoid being hit by oncoming traffic.  
B) Apparatus should be parked at an angle, with the front wheels turned toward the scene.  
C) Apparatus should be parked at an angle, with the front wheels turned away from the scene.  
D) Apparatus should be parked at an angle, with the pump panel facing oncoming traffic.  

Answer --> C


This helps to ensure that the vehicle will not strike working personnel if it is hit from behind. The pump panel should be positioned on the protected side away from traffic.
169) If additional apparatus are called to an emergency scene on a roadway, they should form a second barrier and be positioned ___ from the first apparatus.

A) 50 to 100 feet.
B) 150 to 200 feet.
C) 200 to 300 feet.
D) 250 to 325 feet.

Answer -->  B


170) All the following would be considered guidelines for maintaining situational awareness at a roadway incident except for –

A) Walk facing away from ongoing traffic.
B) Look before you move.
C) Follow department SOPs.
D) Keep an eye on moving traffic.

Answer -->  A


171) Limiting the access of nonemergency personnel to an emergency scene is known as –

A) Crowd restraint.
B) Crowd restriction.
C) Crowd supervision.
D) Crowd control.

Answer -->  D


172) The area beneath a wall in which the wall is likely to land if it loses structural integrity is known as the –

A) Collapse sector.
B) Collapse zone.
C) Collapse area.
D) Collapse region.

Answer -->  B

173) Collapse zones are established under which of the following conditions?

A) Prolonged heat or fire have weaken the structure.
B) A defensive strategy has been adopted.
C) Interior operations cannot be justified.
D) All the above.

Answer --> D


174) Traditionally, collapse zones must extend the distance ____ of the height of the structure.

A) 1 time.
B) 1 1/2 times.
C) 2 times.
D) 2 1/2 times.

Answer --> B


175) Fire department internal communications is responsible for which of the following functions?

A) To process and act on information.
B) To relay alarms and coordinate field communications.
C) To receive telecommunications and dispatch resources.
D) To house communication personnel and dispatch field personnel.

Answer --> C


176) Most people who call the fire department are experiencing some kind of problem or difficulty upsetting enough to want assistance. In view of this, telecommunicators must possess which of the following skills?

(1) Customer Service  (2) A high degree of fire knowledge  (3) Personal communications skills

A) 1, 2.
B) 1, 3.
C) 2, 3.
D) 1, 2, 3.

Answer --> B

177) Any location or facility at which 911 calls are answered either by direct calling, rerouting, or diversion is known as –

A) Public safety answering point.
B) Dispatch center.
C) Telecommunications center.
D) Headquarters.

Answer -->  A

Also known as PSAP.

178) A telecommunicator's duties include all of the following except –

A) Staying in contact with the incident commander.
B) Receiving requests for information and/or additional resources.
C) Keeping records for each request for assistance and how each one was handled.
D) Assigning duties to companies operating on the fire ground.

Answer -->  D


179) Who is most likely to have the most contact with the public within the emergency services system?

A) Telecommunicators.
B) Police Officers.
C) Firefighters.
D) EMTs, and Paramedics.

Answer -->  A


180) Which statement regarding Telecommunicators is NOT true?

A) Telecommunicators must be able to weigh the worthiness of individuals for assistance.
B) Telecommunicators must project a sense of competence.
C) Telecommunicators must be able to dispatch emergency responders in a timely manner.
D) Telecommunicators must be knowledgeable about associated social services that are available to the caller.

Answer -->  A


The purpose of the telecommunicator is to relay information, not weigh the worthiness of individual calls.
181) Which NFPA standard describes the Standard for Installation, Maintenance, and Use of Emergency Services Communications Systems?

A) NFPA 1900.
B) NFPA 1061.
C) NFPA 1060.
D) NFPA 1221

Answer -->  D


182) What percent of United States is covered by enhanced 911?

A) 45%.
B) 68%.
C) 77%.
D) 96%.

Answer -->  D


183) If you were assigned to monitor the watch room, you would have which of the following responsibilities –

A) Listen to all radio communications, and answer the telephone.
B) Acknowledge the receipt of alarms.
C) Notify crew members of telephone calls and messages.
D) All the above.

Answer -->  D


184) As it is applied to the fire service, what does CAD mean?

A) Computer-Aided Drafting.
B) Computer-Aided Dispatch.
C) Computer Agency Dispatch (center).
D) Computer Associated Dispatch.

Answer -->  B

185) Radio systems used in the fire service can be classified in all the following ways except for –

A) By location and size; either fixed, mobile, or portable.
B) By the type of signal used; either analog or digital.
C) By manufacturer and country code.
D) By transmission signal; either direct, repeated, or trunked.

Answer --> C


186) A fixed, nonmobile radio at a center location is known as –

A) Telecommunicator radio.
B) Dispatch radio.
C) Base station radio.
D) Internal radio.

Answer --> C


187) Which is the most widely used method for transmitting fire alarms?

A) The public telephone system.
B) Alarm pull boxes.
C) Alarm company emergency reporting.
D) Non-wired fire alarms.

Answer --> A


188) Which type of telephone line does not have access to the public switch network and does not have a dial tone?

A) Residential lines.
B) Commercial lines.
C) Telephone fire alarm box.
D) Hot lines.

Answer --> C


Telephone fire alarm or call boxes are equipped with a telephone for direct voice contact with the telecommunication center.
189) What do TDD/TTY phones do?

A) They allow the caller to speak over the phone line even if an electronic alarm is also being transmitted over the same line.
B) They allow the telecommunicator to immediately dial back up a caller, if for any reason the connection has been terminated.
C) They allow the telecommunicator to know the exact location of the caller even if the caller hangs up.
D) They allow the hearing or speech-impaired community to communicate over the phone system.

Answer -->  D


190) Equipment designed and approved to be used inflammable atmospheres that are in capable of releasing sufficient electrical energy to cause the ignition of a flammable atmospheric mixture are called –

A) Intrinsically safe equipment.
B) Explosion proof equipment.
C) Explosion resistant equipment.
D) Intrinsic safety equipment.

Answer -->  A


191) Amplitude Modulation AM waves vary the strength of the signal to reflect the speaker’s voice and are sometimes referred to as –

A) Analog wave signals.
B) Medium wave signals.
C) Digital wave signals.
D) Highband wave signals.

Answer -->  B


192) Which of the following statements regarding digital radios is correct?

A) Digital transmission systems have supplemented and, in some cases, replaced analog transmission systems.
B) Digital radios have improved audio quality and make better use of their assigned frequency or band.
C) A digital transmitter converts the voice into digital data packets, which are then broadcast to the receiver.
D) All the above.

Answer -->  D

193) What is the first thing a telecommunicator should ask when receiving an emergency call?

A) The callers call back number.
B) The location of the emergency.
C) The type of emergency.
D) The name and location of the caller.

Answer --> C


The telecommunicator should also ask the number and location of people involved, as well as the cross street, building name, neighborhood, area of city or county, or any nearby landmarks.

194) Which of the following refers to the straight-line travel of radio signals between the antenna connected to the transmitter and the antenna connected to the receiver?

A) Indirect communication.
B) Remote access communication.
C) Direct communication.
D) Digital communication.

Answer --> C


Direct communication does not allow the same radio channel to be used by other groups that are located at a greater distance from the first group.

195) When answering business calls, personnel should do all of the following except –

A) Be prepared to take a message.
B) Answer all calls promptly.
C) Post or deliver any messages promptly.
D) Terminate calls promptly.

Answer --> D


Allow the caller to hang up first. Always be the last to hang up.

196) When one radio transmits and another receives, the type of communication is called –

A) Simplex system.
B) Multiplex system.
C) Truncated system.
D) Duplex system.

Answer --> A


A simplex system is a two-party system operating on one frequency because only one radio can transmit at a time.
197) Wired telegraph circuit boxes are most commonly used in –

A) Metropolitan and heavy industrial areas.
B) Residential areas.
C) Rural areas.
D) Wilderness areas.

Answer --> A


198) The function included with some portable radios which permit units at an incident to communicate directly to each other our called –

A) Walkie-talkie mode.
B) Local mode.
C) Proximity mode.
D) Talk-around mode.

Answer --> D


199) All of the following would be examples of "Public Alerting Systems" except –

A) Alarm initiating devices.
B) Wired telegraph circuit boxes.
C) Radio fire alarm boxes.
D) Civilian walk in reporting.

Answer --> A


200) 911 systems that combine telephone and computer equipment, and provide the dispatcher with instant information as to the exact location a call is being made from is called –

A) X–911.
B) M–911.
C) E–911.
D) A–911.

Answer --> C


Enhanced 9–1–1
201) Repeaters are normally used to overcome problems of barriers to direct communications. They are used to increase the range of the radio system and to send signals over tall barriers. This is known as

A) Simplex radio communication.
B) Multiplex radio communication.
C) Full-duplex communication.
D) Half-duplex communication.

Answer -->  D


202) Which 9-1-1 feature provides the telecommunicator with the location the call is being made from?

A) Called party hold.
B) ALI.
C) ANI.
D) ALL.

Answer -->  B


Automatic Location Identification

203) ____ allows radio communication in both directions simultaneously such as communications on a landline telephone.

A) Half-duplex.
B) Full-duplex.
C) Simplex.
D) Digital.

Answer -->  B


204) Wired telegraph circuit boxes transmit which of the following information?

A) The location of the box.
B) The location of the emergency.
C) The nature of the emergency.
D) All the above.

Answer -->  A

205) A radio fire alarm box alerts the telecommunicator by –

A) An audible signal.
B) A visual light indicator.
C) A printed record indicating the location.
D) All the above.

Answer -->  D


206) The radio system in which a radio frequency is dedicated to a single function such as operations is known as –

A) Conventional system.
B) Progressive system.
C) Trunked system.
D) Simplex system.

Answer -->  A


207) One of the most effective ways of alerting firefighters of an emergency is via –

A) Telephone.
B) Pagers.
C) Sirens.
D) Home electronic monitors.

Answer -->  B


208) All radio communications in the United States are under the authorization of the –

A) FAA.
B) FCC.
C) FDA.
D) DOT.

Answer -->  B


Federal Communications Commission.
209) For the most part, wired telegraph circuit boxes have been eliminated from many municipalities because problems with –

A) Power outages.
B) Reoccurring breakdowns.
C) False Alarms.
D) Vandalism.

Answer --> C


210) The radio system that improves efficiency by assigning transmissions two available frequencies is known as –

A) Trunked system.
B) Progressive system.
C) Conventional system.
D) Duplex system.

Answer --> A


211) All of the following methods are normally used to alert unstaffed station personnel of emergencies except –

A) Pagers.
B) Home electronic monitors.
C) Telephones.
D) House bell or gong.

Answer --> D


Also cell phones, text messaging, sirens, and whistles are used to alert personnel.

212) In order to be compliant with the National Incident Management System (NIMS), most fire departments communicate over radio waves using –

A) 10 Codes.
B) Signals.
C) Numeric codes.
D) Clear text.

Answer --> D

CodeRQ
213) When speaking on a portable radio firefighters should –

A) Speak slightly louder than normal.
B) Speak slightly quieter than normal.
C) Shout into the radio.
D) Speak as quickly as possible to free up the channel for other radio traffic.

Answer -->> A


214) Which of the following features of a trunked radio system allows the transmission of calls to two or more talk groups?

A) Private call.
B) Dynamic regrouping.
C) Multigroup call.
D) Multi-call.

Answer -->> C

Once the connection is established, the talkgroups can communicate with each other.

215) Which of the following features of a trunked radio system permits one radio to call another much like a telephone call?

A) Truncated call.
B) Multigroup call.
C) Dynamic regrouping.
D) Private call.

Answer -->> D

The conversation is private and will not be heard by others on the channel or talkgroup.

216) Which of the following features of a trunked radio system has an emergency alert feature that, if activated, sends a signal to the agency's dispatch center?

A) Truncated system.
B) Private call.
C) Dynamic regrouping.
D) Multigroup call.

Answer -->> C

217) There are four main limitations or barriers to all radio transmissions. They include distance and all but which of the following?

A) Power requirements.  
B) Physical barriers.  
C) Interference.  
D) Ambient noise.

Answer --> A


218) The use of plain English, including certain standard words and phrases, in radio communications transmissions is known as –

A) Clear Voice.  
B) Plain Voice.  
C) Clear Text.  
D) Plain Text.

Answer --> C


219) Why should firefighters refrain from touching the antenna of a radio while transmitting?

A) Doing so blocks incoming messages.  
B) Doing so blocks your outgoing message.  
C) Radio frequency burns might result.  
D) The will become damaged.

Answer --> C

Notes) Essentials Of Fire Fighting And Fire Department Operation.

No reference in this edition, but question appears on many tests.

220) When using a radio, you should hold the radio/microphone –

A) Right against your lips.  
B) 1/2 inch away from your lips.  
C) 1 to 2 inches away from your lips.  
D) 2 to 3 inches away from your lips.

Answer --> C

221) Any physical barrier between the transmitter and receiver can block a radio signal. Signals can be totally blocked, partially blocked, or reflected. To overcome physical barriers, you may need to –

A) Turn your body 90 degrees.
B) Lift the portable radio higher.
C) Raise the antenna up straight.
D) All the above.

Answer --> D


222) Radio dead zones in rural areas may not be possible to overcome without the addition of

A) Higher radio towers.
B) Higher wattage radios.
C) Vehicle-mounted or fixed repeaters.
D) Digital transformers.

Answer --> C


223) During radio communications, the person who initiates the message using both verbal and nonverbal communication is known as the –

A) Messenger.
B) Sender.
C) Receiver.
D) Interference.

Answer --> B


224) During radio communications, the person who the sender is attempting to communicate to is known as the –

A) Target.
B) Feedback.
C) Receiver.
D) Interference.

Answer --> C

225) In radio communication, the content of the sender is trying to communicate to the receiver is known as the –

A) Message.
B) Broadcasts.
C) Notification.
D) Briefing.

Answer --> A


226) In radio communication, anything that may prevent the receiver from completely understanding the message is known as –

A) Conflict.
B) Obstruction.
C) Resistance.
D) Interference.

Answer --> D


227) Every firefighter at the emergency scene should follow two basic rules to control communication. The first is, units or individuals must identify themselves in every transmission, as outlined in the local radio protocols.

A) Units or individuals must identify their current positions in every transmission, as outlined in the local radio protocols.
B) Besides chief officers, only company officers leading fire department companies, should be issued radios at emergency scenes.
C) All individuals using portable radios must be at least 25 feet away from any apparatus staged at an emergency scene.
D) The receiver must acknowledge every message by repeating the essence of the message to the sender.

Answer --> D


228) To ensure that radio communication is heard and understood, you should follow all the following guidelines except for –

A) Know what you are going to say before you open the microphone.
B) Avoid expression in your speech; use a monotone whenever possible.
C) Do not transmit until the radio frequency is clear.
D) Use a voice quality that is not too strong nor too weak.

Answer --> B


Use a moderate amount of expression in your speech, which is not too monotone nor overemphasized. Place emphasis carefully.
229) What is the first statement the telecommunicator should convey when receiving an emergency call?

A) Address the location of the emergency.
B) Identify the agency.
C) Gather information from the caller.
D) Confirm the caller's identity.

Answer --> B


230) What is the most common building material in North America?

A) Wood.
B) Steel.
C) Brick.
D) Gypsum.

Answer --> A


231) Which is normally an interior wall that supports only its own weight?

A) Load-bearing wall.
B) Non load-bearing wall.
C) Partition wall.
D) Fire wall.

Answer --> B


232) A wall that is used for structural support is called a –

A) Load-bearing wall.
B) Cantilever wall.
C) Partition wall.
D) Fire wall.

Answer --> A

233) A wall that separates a space into rooms is called a –

A) Veneer wall.  
B) Cantilever wall.  
C) Partition wall.  
D) Fire wall.

Answer -->  C


234) A wooden structural panel form by gluing and compressing wood strands together under pressure is known as –

A) Veneer board.  
B) Compressed board.  
C) Oriented strand board.  
D) Plywood.

Answer -->  C


This material has replaced plywood and planking in the majority of construction applications. Roof decks, walls, and subfloors, are all commonly made with OSB.

235) Walls with a surface layer of attractive material laid over a base of common material is called a –

A) Veneer wall.  
B) Cantilever wall.  
C) Overhang wall.  
D) Fire wall.

Answer -->  A


236) Green wood is wood –

A) That has just been sawn into lumber.  
B) That has a characteristic green grain such as poplar.  
C) With a high moisture content.  
D) That is unpainted or unfinished.

Answer -->  C

237) Which of the following would be considered masonry?

(1) Bricks  (2) Blocks  (3) Stones  (4) Unreinforced concrete products  (5) Reinforced concrete products

A) 1, 3, 5.  
B) 1, 2, 3.  
C) 3, 4, 5.  
D) 1, 2, 3, 4, 5.

Answer -->  D


238) Firefighter Karen says that the reaction of wood to fire conditions depends mainly on the size of the wood. Firefighter Kim says that the reaction of wood to fire conditions depends mainly on the moisture content of the wood. Who is correct?

A) Firefighter Karen.  
B) Firefighter Kim.  
C) Both are correct.  
D) Neither are correct.

Answer -->  C


239) All of the following statements are true regarding the reaction of wood to fire conditions, except –

A) The two main factors regarding the reaction of wood to fire conditions are: the size of the wood and the wood’s moisture content.  
B) Smaller pieces of wood can not be protected by drywall or gypsum to increase the resistance to heat and fire.  
C) Larger pieces of wood will retain much of their original structural integrity, even after extensive fire exposure.  
D) The smaller the size of the wood, the more likely it is to lose its structural integrity.

Answer -->  B

240) Which of the following statements is NOT true?

A) Wood with a high moisture content will burn at a slower rate than wood with a lower moisture content.
B) The smaller the wood size of a structural member, the faster it will lose its structural integrity.
C) Heavy timber constructed buildings will retain much of its structural integrity even after extensive exposure to fire.
D) Fire retardants will almost always be totally effective in reducing fire spread.

Answer --> D


Fire retardants are not always totally effective in reducing fire spread. Also, pressure-treated wood weakens the wood's fire carrying ability by as much as 25%.

241) What common problem occurs when water is used to extinguish a chimney flue fire?

A) Chemical decomposition of the brick.
B) Spalling and cracking of the brick.
C) Deterioration of the mortar between the bricks.
D) All of the above.

Answer --> B


242) Steel structural members will begin to fail at temperatures near or above –

A) 500 degrees F.
B) 1000 degrees F.
C) 1500 degrees F.
D) 2000 degrees F.

Answer --> B


243) The temperature at which steel will begin to fail depends on all of the following factors except –

A) The size of the steel member.
B) The amount of load it is subjected to.
C) The geometry of the member.
D) The age of the steel member.

Answer --> D

244) Which of the following statements is NOT true?

A) If water is applied to a hot steel member, it increases the chances that the member will collapse.
B) Firefighters should always try to determine how long a steel member has been exposed to heat.
C) Heat expands steel and can cause elongating of members, which can push out load bearing walls.
D) All of the above statements are true.

Answer --> A


245) Which statement regarding reinforced concrete is true?

A) Heating may cause a failure of the bond between the concrete and the steel reinforcement.
B) Possesses the tensile strength of steel.
C) Loses it’s strength and spalls when heated.
D) All of the above.

Answer --> D


246) Which of the following types of building materials has a high water content, is excellent in heat resistance, and is an excellent fire retardant?

A) Steel.
B) Glass/Fiberglass.
C) Reinforced Concrete.
D) Gypsum.

Answer --> D


247) Which statement is NOT true regarding the use of cast iron as a building material?

A) Cast iron is used rarely in modern construction.
B) Cast iron does not stand up well to fire and intense heat.
C) Cast iron is typically found in older buildings.
D) The primary concern to firefighters is that the bolts or other connections that hold cast iron to a building can fail, causing heavy sections to fall.

Answer --> B


Cast iron actually stands up quite well to fire and intense heat.
248) Fiberglass is typically used in building construction –
   A) As non-conducting structural units.
   B) As veneer walls.
   C) For insulation purposes.
   D) All the above.

   Answer -->  C


   Fiberglass may be combustible and can be difficult to extinguish.

249) Type I building construction is often called –
   A) Fire-resistive construction.
   B) Fireproof construction.
   C) Non-combustible construction.
   D) Semi-combustible construction.

   Answer -->  A


250) The ability for a Type I construction to confine a fire to a certain area, can be compromised by which of the following?
   A) Combustible materials found within the walls of the structure.
   B) The nature of the room's contents.
   C) Openings made in partitions or improperly dampered or improperly designed heating systems.
   D) Combustible materials found in the foundation.

   Answer -->  C


251) Type II construction buildings often have flat, built-up roofs. What is the main fire hazard in this type of construction type?
   A) The roof contains combustible foam insulation and felt paper covered with asphalt waterproofing.
   B) The absence of fire stops.
   C) Poorly designed heating and air conditioning systems.
   D) Often are supported by wooden beams.

   Answer -->  A


   CodeRQ
252) Which building construction type is often referred to as "Wood-Framed" construction?

A) Type II.
B) Type III.
C) Type IV.
D) Type V.

Answer -->  D


Type V construction is commonly known as wood frame or stick frame.

253) Which building construction type is referred to as "Ordinary Construction?"

A) Type I.
B) Type II.
C) Type III.
D) Type V.

Answer -->  C


254) Which building construction type is often referred to as "Heavy Timber" construction?

A) Type II.
B) Type III.
C) Type IV.
D) Type V.

Answer -->  C


255) The primary fire concern regarding Type III building construction is –

A) Fire spread through concealed spaces.
B) Fire spread through heating and air conditioning systems.
C) Fire spread caused by excessive fire stops.
D) All the above.

Answer -->  A


Voids exist inside the wooden channels created by roof and truss systems and between wall studs that will allow for the spread of fire unless fire stops are installed in these voids.
256) Old factories, mills and warehouses would most likely be classified as which of the following building construction classifications?

A) Type II.
B) Type III.
C) Type IV.
D) Type V.

Answer --> C


257) Pressure treating wood will weaken the wood's load carrying ability by as much as –

A) 10%.
B) 15%.
C) 20%.
D) 25%.

Answer --> D


258) The strength of a truss support is directly proportional to –

A) The nature of the materials used to make the truss.
B) The number of members that make up the truss.
C) The thickness of the truss.
D) The age of the truss.

Answer --> B


259) Wooden trusses and I-beam supports are commonly made from –

A) 1 x 3 or 1 x 4 inch boards.
B) 2 x 3, 2 x 4, or 2 x 6 inch boards.
C) 2 x 8 inch boards.
D) 3 x 6 or 3 x 8 inch boards.

Answer --> B

260) Expansion of excess moisture within masonry materials due to the exposure to the heat of a fire, resulting in tensile forces within the material, and causing it to break apart is known as –

A) Spalling.
B) Compressing.
C) Fracturing.
D) Rupturing.

Answer --> A


261) Structural supports made from long steel bars that are bent at an 90 degree angle with flat or angular pieces welded to the top and bottom are known as –

A) Cast iron truss.
B) Lightweight wooden truss.
C) Lightweight steel truss.
D) Iron truss.

Answer --> C


262) A non-loadbearing wall, often of glass and steel, fixed to the outside of a building and serving especially for cladding is known as –

A) Retaining wall.
B) Loadbearing wall.
C) Non-loadbearing wall.
D) Curtain wall.

Answer --> D


263) What do the decorative stars sometimes seen on older buildings represent?

A) They show that the building has won an architectural award in the past.
B) They mark the location of fire department standpipe connections.
C) They are reinforcement stars, which may mean that the structure is of questionable stability.
D) Nothing, they are merely a decorating trend that was popular in the early 20th century.

Answer --> C


The stars are connected by tension rods to stars located on the opposite side of the building.
264) Metal or wooden plates used to connect and strengthen the intersections of metal and wooden truss components are known as –

A) Gang plates.
B) Gusset plates.
C) Goose plates.
D) Gable plates.

Answer -->  B


265) What type of building construction should a firefighter suspect on a building with a rounded or arched roof?

A) Lightweight steel trusses.
B) Bowstring trusses.
C) Heavy timber construction.
D) Lightweight wooden trusses.

Answer -->  B


266) All trusses are made using the strongest geometric shape known, which is the –

A) Square.
B) Octagon.
C) Rhombus.
D) Triangle.

Answer -->  D


267) Steel bars that are placed in concrete forms before the cement is poured are known as –

A) Abutments.
B) Rebar.
C) Cornerstones.
D) Footings.

Answer -->  B

268) The type of building construction that uses renewable, environmentally friendly or recycled materials is known as –

A) Natural construction.
B) Green construction.
C) Hybrid construction.
D) All the above.

Answer -->  D


269) A second roof constructed over an older roof is called a –

A) Secondary roof.
B) Hidden roof.
C) Rain roof.
D) Storm roof.

Answer -->  C

This type of construction can leave a concealed space that is not visible from the outside of a building.

270) Doors that have either a solid core or a hollow core are best known as –

A) Panel doors.
B) Slab doors.
C) Ledge doors.
D) Swinging doors.

Answer -->  B

Also known as flush doors.

271) __ are also called pocket doors when used as an interior door.

A) Sliding doors.
B) Revolving doors.
C) Overhead doors.
D) Tubular doors.

Answer -->  A

272) Which of the following types of revolving doors has a 1/4 inch cable holding the doors apart? To collapse the mechanism, the firefighter only needs to push the doors (wings) in opposite directions.

A) Book-fold type.
B) Drop-arm type.
C) Metal-Braced type.
D) Classic type.

Answer --> A


273) __ windows are windows that usually consist of two sashes that meet in the center that are locked together with a latch or a bolt on the inside.

A) Double-hung.
B) Casement.
C) Projected.
D) Jalousie.

Answer --> A


Also known as Checkrail windows.

274) The type of window often called "crank out window" best describes which of the following?

A) Awning windows.
B) Jalousie windows.
C) Checkrail windows.
D) Casement windows.

Answer --> D


275) Which window is usually associated with factories, warehouses, and other commercial or industrial locations?

A) Casement windows.
B) Projecting windows.
C) Awning windows.
D) Jalousie windows.

Answer --> B

276) __ consists of large sections of glass usually about 1 foot in width, and are as long as the width of the opening of the window.

A) Awning windows.  
B) Jalousie windows.  
C) Projected windows.  
D) Casement windows.  

Answer --> A  


277) __ have small 4 inch wide sections that run as long as the window’s width, and normally constructed without frames.

A) Awning windows.  
B) Jalousie windows.  
C) Projected windows.  
D) Casement windows.  

Answer --> B  

Also called louvered windows.

278) Small pieces of wood that are joined in too long boards using epoxy resins and glues are called –

A) Finger-joint timber.  
B) Laminated timber.  
C) Particle board.  
D) Synthetic wood.  

Answer --> A  


279) Boards made from small particles and flakes generated in manufacture of lumber, and used for external or internal wall panels and for furniture are called –

A) Finger-joint timber.  
B) Laminated timber.  
C) Particle board.  
D) Synthetic wood.  

Answer --> C  

280) Also known as plywood or glulam, ____ are sheets of wood used for roof and floor decking, walls, and stair treads among other uses.

A) Finger-joint timber.
B) Laminated timber.
C) Particle board.
D) Synthetic wood.

Answer --> B


281) Which of the following laminated wood products is closer in appearance and strength the hardwood?

A) Medium density fiberboard.
B) Laminated timber.
C) Particle board.
D) Synthetic wood.

Answer --> A


It is used for doors and door-surrounds, decorative moldings, rails, skirtings, and cornices.

282) Which material is produced into sheets and boards, and is manufactured from recycled plastic from liquid containers, primarily milk bottles?

A) Medium density fiberboard.
B) Laminated timber.
C) Particle board.
D) Synthetic wood.

Answer --> D


Synthetic wood is primarily used for exterior rails, stairs, and decks.

283) In the United States which of the following would be considered the NFPA standard for Building Construction and Safety Code?

A) NFPA 1011.
B) NFPA 610.
C) NFPA 4000.
D) NFPA 5000.

Answer --> D

284) Steel structural members that are covered with either spray-on fire proofing or fully encased in a UL tested and approved system, are known as –

A) Protected steel.  
B) Coated steel.  
C) Reinforced steel.  
D) Fireproof steel. 

Answer --> A


285) Solid materials, such as wood blocks, used to prevent or limit the vertical and horizontal spread of fire and products of combustion in hollow walls or floors, above false ceilings, in penetrations for plumbing or electrical installations are called –

A) Fire blocks.  
B) Fire stops.  
C) Fire breaks.  
D) All the above. 

Answer --> B


286) The National Building Code of Canada defines three types of building construction. Which of the following would not be considered one of these?

A) Combustible construction.  
B) Noncombustible construction.  
C) Heavy timber construction.  
D) Ordinary construction. 

Answer --> D


287) A fire-rated wall with a specified degree of fire resistance, built of fire–resistive materials and usually extending from the foundation up and through the roof of the building, that is designed to limit the spread of fire within a structure or between adjacent structures is known as a –

A) Fire stop.  
B) Party wall.  
C) Fire wall.  
D) Ridge wall. 

Answer --> C

288) A load-bearing wall shared by two adjacent structures is known as –

A) Party wall.
B) Rafter wall.
C) Purlin.
D) Rain wall.

Answer --> A


289) The portion of the exterior walls of a building that extends above the roof is known as a –

A) Ridge.
B) Parapet.
C) Eave.
D) Rafter.

Answer --> B


It is also a low wall at the edge of the roof.

290) The horizontal line at the junction of the top edges of two sloping roof surfaces is called the –

A) Ridge.
B) Parapet.
C) Eave.
D) Rafter.

Answer --> A


291) The edge of a pitched roof that overhangs an outside wall is called a –

A) Ridge.
B) Parapet.
C) Eave.
D) Rafter.

Answer --> C


Attic vents in typical eaves provide an avenue for an exterior fire to enter the attic.
292) What would you consider one of the most dangerous types of roof construction?

A) Mansard roofs.
B) Gambrel roofs.
C) Lantern roofs.
D) Arched roofs.

Answer -->  D


The rapid collapse of arched roofs involved in fire has contributed to many firefighter injuries and fatalities.

293) Which of the following would be considered general types of roof supports used in residential and commercial construction?

A) Beams.
B) Truss assemblies.
C) Rafter assemblies.
D) A and B.

Answer -->  D


294) An inclined beam that supports a roof, runs parallel to the slope of the roof, and to which the floor decking is attached, is known as a –

A) Parallel cord truss.
B) Joist.
C) Purlin.
D) Rafter.

Answer -->  D


295) A truss constructed with the top and bottom chords parallel is known as –

A) Parallel cord truss.
B) Parallel rafter.
C) Purlin.
D) Parallel plate.

Answer -->  A


These trusses are used as floor joists and multistory buildings and ceiling joists in buildings with flat roofs.
296) Horizontal structural members used to support a ceiling or floor are called –
A) Purlins.  
B) Joists.  
C) Ceiling plates.  
D) Rafter plates.  
Answer -->  B  

297) A horizontal member between trusses that support the roof are called –
A) Purlin.  
B) Joist.  
C) Ceiling plate.  
D) Rafter plate.  
Answer -->  A  

298) A concealed space between the top floor and the roof of a structure is called a –
A) Cockloft.  
B) Crawlspace.  
C) Attic.  
D) Dormer.  
Answer -->  A  

299) The weight of a structure, structural members, building components, and any other features permanently attached to the building that are constant and immobile are known as –
A) Dead weight.  
B) Live load.  
C) Dead load.  
D) Structural load.  
Answer -->  C  
300) The type of roof installation generally found in cold, snowy climates to prevent ice damming and icicle formation at the eaves are called –

A) Ice roofs.
B) Cold roofs.
C) Green roofs.
D) White roofs.

Answer -->  B


301) The type of roof installation containing solar panels that produce clean and reliable energy that can be used in a wide range of applications are called –

A) Ice roofs.
B) Photovoltaic roofs.
C) Green roofs.
D) White roofs.

Answer -->  B


302) The type of roof installation that incorporates rooftop gardens are called –

A) Eco–roofs.
B) Photovoltaic roofs.
C) Green roofs.
D) White roofs.

Answer -->  C


303) The removal of load-bearing interior walls, or the removal of load-bearing pillars or columns in a structure would be an example of –

A) Security modifications.
B) Permitted structural modifications.
C) Nonpermitted modifications.
D) Aesthetic modifications.

Answer -->  C

304) Which of the following would be the best definition for the term live load?

A) Items within a building that are movable but are not included as a permanent part of the structure such as merchandise, stock, furnishings, occupants, firefighters, and the water used for fire suppression.
B) Force placed upon a structure by the addition of people, objects, or weather.
C) Weight of the structure, structural members, building components, and any other feature permanently attached to the building that are constant in immobile.
D) A and B.

Answer -->  D


305) The continuous and unobstructed way of exit travel from any part of a building or structure to a public way, consisting of three separate and distinct parts: exit access, exit, and exit discharge is called –

A) Means of egress.
B) Means of escape.
C) Means of evacuation.
D) Means of passage.

Answer -->  A


306) Stairs that are not required to be part of the means of egress system and typically connect no more than two levels are called –

A) Escape stairs.
B) Interior stairs.
C) Short stairs.
D) Convenience stairs.

Answer -->  D


Also called access stairs.

307) Which of the following types of stairs are enclosed with fire-rated construction, usually with either a one or two hour rating, depending on the building ?

A) Fire resistive stairs.
B) Flameproof stairs.
C) Protected stairs.
D) Fire escape stairs.

Answer -->  C

308) Which of the following statements regarding obtaining access to the upper floors of a building is true?

A) No matter how secure fire escapes appear, they may not hold the weight of firefighters or occupants, and should never be used.
B) Firefighters should use interior stairways for gaining access to upper floors of a building.
C) Firefighters should use fire department ground ladders and aerial devices to gain access to upper floors of a building.
D) All the above.

Answer -->  D


309) A door that rotates around a vertical axis by means of hinges secured to the side jambs of the doorway framing is commonly called a –

A) Swinging door.
B) Sliding door.
C) Folding door.
D) Vertical door.

Answer -->  A


310) A door that is suspended from an overhead track and may use steel or nylon rollers is called a –

A) Swinging door.
B) Sliding door.
C) Folding door.
D) Vertical door.

Answer -->  B


311) A door that opens in a vertical plane and is known as an overhead door and often found in industrial occupancies for applications such as loading docks, garage doors, and freight elevator doors is commonly called a –

A) Revolving door.
B) Sliding door.
C) Folding door.
D) Vertical door.

Answer -->  D

312) A door that is hung from an overhead track with rollers or glides similar to those used in a sliding door is commonly called a –

A) Revolving door.  
B) Pocket door.  
C) Folding door.  
D) Vertical door.  

Answer -->  C  


A folding door can either be bifolding or multifolding.

313) A door constructed with three or four sections or wings that rotate in a circular frame is called a –

A) Revolving door.  
B) Pocket door.  
C) Circular door.  
D) Round door.  

Answer -->  A  


314) Which of the following windows have only one sash that can be opened?

A) Double–hung window.  
B) Single–hung window.  
C) Casement window.  
D) Awning window.  

Answer -->  B  


315) A fix window consists only of a frame and a glazed stationery sash. It can be used alone or in combination with movable windows. Which of the following would be considered another name for a fixed window?

A) Display window.  
B) Picture window.  
C) Deadlight.  
D) All the above.  

Answer -->  D  

316) Which of the following windows has two or more sashes of which at least one moves horizontally within the window frame?

A) Horizontal sliding window.
B) Awning window.
C) Jalousie window.
D) Pivoting window.

Answer --> A


317) Which of the following windows as a sash that pivots horizontally or vertically about a central axis?

A) Horizontal sliding window.
B) Awning window.
C) Jalousie window.
D) Pivoting window.

Answer --> D


318) Which common roof style slopes down from the outside edges to the center of the building?

A) Mansard.
B) Gambrel.
C) Butterfly.
D) Shed.

Answer --> C


319) Which would not be considered one of the three basic shapes of roofs?

A) Shed.
B) Flat.
C) Arched.
D) Pitched.

Answer --> A

320) The study of the physical world around us that includes the sciences of chemistry and physics is called –
A) Physical science.
B) Environmental science.
C) Physio-Ecology.
D) Natural sciences.
Answer -->  A


A physical science is the study of the physical world. Properties of physics and chemical reactions are part of the physical world.

Environmental, Physio-Ecology and Natural sciences would all be included in the Biological Sciences.

321) Energy exists in which of the following states?
(1) Kinetic energy  (2) Chemical energy  (3) Thermal energy  (4) Potential energy  (5) Physical energy
A) 1, 4.
B) 2, 5.
C) 2, 3, 5.
D) All the above.
Answer -->  A


322) Stored energy possessed by an object that can be released in the future to perform work is known as –
A) Kinetic Energy.
B) Power.
C) Heat.
D) Potential Energy.
Answer -->  D

323) The energy possessed by a moving object is known as –

A) Kinetic Energy.
B) Traveling Energy.
C) Spontaneous Energy.
D) Dynamic Energy.

Answer --> A


324) __ is a rapid and self-sustaining chemical process that yields heat and usually light.

A) Fire.
B) Combustion.
C) Oxidation.
D) A and B.

Answer --> D


325) Iron rusting is a prime example of which of the following reactions?

A) Oxidation reaction.
B) Endothermic reaction.
C) Chemical reaction.
D) Physical reaction.

Answer --> A


326) Our atmosphere contains __ oxygen.

A) 10%.
B) 21%.
C) 75%.
D) 85%.

Answer --> B

327) Chemical reactions in which a substance absorbs heat energy are called –

A) Oxidation reactions.
B) Exothermic heat reactions.
C) Endothermic heat reactions.
D) Combustion reactions.

Answer --> C


328) Chemical reactions between two or more materials that changes the materials and produces heat, flames, and toxic smoke are –

A) Oxidation reactions.
B) Exothermic heat reactions.
C) Endothermic heat reactions.
D) Combustion reactions.

Answer --> B


Exothermic reactions are chemical reactions that release thermal energy or heat.

329) Oxidation reactions can be characterized by which of the following?

(1) Endothermic  (2) Exothermic  (3) Energy Releasing  (4) Energy Absorbing  (5) Non-reactive

A) 1, 4.
B) 2, 3.
C) 1, 5.
D) 5

Answer --> B


330) The four main components of the Fire Tetrahedron include fuel, heat, oxygen and –

A) Inhibited chemical chain reaction.
B) Continuous chemical chain reaction.
C) Self-sustained chemical reaction.
D) Partial chemical chain reaction.

Answer --> C

331) Which of the following statements regarding the Fire Tetrahedron is NOT true?

A) If one component of the Fire Tetrahedron is removed, then combustion will not occur.
B) If ignition of a fire has already occurred, and if one of the components of the Fire Tetrahedron is removed, then the fire will be extinguished.
C) The Fire Triangle has always been a more accurate representation of combustion, than the Fire Tetrahedron.
D) A self-sustaining chemical reaction, may be rapid or slow.

Answer --> C


332) An oxidizer would be defined as –

A) A material that yields oxygen or other oxidizing gases during the course of a chemical reaction.
B) A material that suppresses the release of oxygen during the course of a chemical reaction.
C) A material that bonds with oxygen during the course of a chemical reaction, causing suppression of combustion.
D) A material that is chemically inert, and therefore does neither utilize nor yield oxygen or other oxidizing gases during the course of a chemical reaction.

Answer --> A


333) Which is an example of "Potential Energy?"

A) The water as it flows from a hydrant into the tank of a 1000 gallon pumper.
B) The water inside a charged hoseline.
C) The water as it leaves the hose as the nozzle is opened.
D) The water that remains on the floor of a room after it has been used to extinguish a fire.

Answer --> B


334) Which is an example of "Kinetic Energy?"

A) The water sitting in the tank of a 1000 gallon pumper apparatus.
B) The water inside a charged hoseline.
C) The water as it leaves the hose as the nozzle is opened.
D) The water that remains on the floor of a room after it has been used to extinguish a fire.

Answer --> C

335) What is a measurement of kinetic energy?

A) Temperature.
B) Joules.
C) Work.
D) Speed.

Answer --> A


A fuel's kinetic energy is the result of molecules that are vibrating. Thermal energy increases as the vibration of the molecules increase.

336) Which statement is true?

A) Heat energy will move from objects of higher temperature to those of lower temperature.
B) Heat energy will move from objects of lower temperature to those of higher temperatures.
C) Heat energy is self-fueling.
D) Heat energy destroys matter.

Answer --> A


337) In the SI system the unit for "work" is –

A) Newtons.
B) Joule.
C) Horse Power.
D) WK.

Answer --> B


338) A joule is equal to –

A) 1 newton over a distance of 1 millimeter.
B) 1 newton over a distance of 1 kilometer.
C) 1 newton over the distance of 1 meter.
D) 1 newton over the distance of 10 meters.

Answer --> C

339) __ is a form of energy characterized by vibration of molecules and capable of initiating in supporting chemical changes and changes of state.

A) Potential energy.
B) Kinetic energy.
C) Work.
D) Heat.

Answer --> D


340) The amount of energy delivered over a period of time is called –

A) Potential energy.
B) Kinetic energy.
C) Power.
D) Work.

Answer --> C


341) The amount of heat necessary to raise one pound of water 1 degree Fahrenheit is known as a –

A) Calorie.
B) British Thermal Unit (BTU).
C) Kilocalorie.
D) Joule.

Answer --> B


342) Water will be in a frozen state at which of the following temperatures.

(1) 0 Degrees F (2) 0 Degrees C (3) 32 Degrees F (4) 32 Degrees C

A) 1, 4.
B) 2, 3.
C) 1, 2, 3.
D) All the above.

Answer --> C


This is a trick question. It is not asking for the freezing temperature, but rather at what temperatures would you expect to see water frozen.
343) Water will boil at which of the following temperatures?

(1) 202 Degrees F  (2) 212 Degrees F  (3) 100 Degrees F  (4) 100 Degrees C  (5) 145 Degrees F

A) 1, 2.
B) 2, 4.
C) 1, 4.
D) All the above.

Answer -->  B

Although water will boil at 212 degrees F, firefighters should be well aware that the scalding temperature of water is 145 degrees F. Although at 145, the water does not boil, it still can cause severe tissue damage.

344) The temperature scale in which water freezes at 0 and boils at 100 is known as –

A) Fahrenheit.
B) Celsius.
C) Kelvin.
D) None of the above.

Answer -->  B


345) The amount of heat necessary to raise one gram of water 1 degree Celsius is known as a –

A) Calorie.
B) British Thermal Unit (BTU).
C) Kilocalorie.
D) Joule.

Answer -->  A

Notes) Not listed in 6th Edition, but important to know.

346) How many joules of heat energy must be added to a kilogram of water in order to increase its temperature by 1 degree celsius?

A) 10
B) 4200
C) 1055
D) 100

Answer -->  B


4.2 Joules is the quantity of heat required to change the temperature of 1 g of water 1 degree C.
347) The chemical decomposition of a substance through the action of heat is called –
A) Oxidation.
B) Thermal Decay.
C) Pyrolysis.
D) Thermal Degeneration.
Answer --> C

348) Which of the following would be considered forms of ignition?
(1) Autoignition (2) Mechanical ignition (3) Piloted ignition (4) Spontaneous ignition.
A) 1, 2.
B) 1, 3.
C) 1, 3, 4.
D) All the above.
Answer --> B

349) Which type of ignition occurs when a mixture of fuel and oxygen encounter an external heat source with sufficient heat energy to start the combustion reaction?
A) Passive ignition.
B) Active ignition.
C) Piloted ignition.
D) Autoignition.
Answer --> C

350) __ occurs without any external flame or spark to ignite the fuel gases or vapors.
A) Passive ignition.
B) Active ignition.
C) Piloted ignition.
D) Autoignition.
Answer --> D
351) The lowest temperature at which a combustible material ignites in the air without a spark or flame is known as the –

A) Flash point.
B) Fire point.
C) Autoignition temperature.
D) Piloted ignition temperature.

Answer --> C


CodeRQ

352) Which would NOT be considered common sources of heat that result in the ignition of fuel?

A) Chemical energy.
B) Mechanical energy.
C) Electrical energy.
D) Light energy.

Answer --> D


353) Which is the most common source of heat in combustion reactions?

A) Electrical energy.
B) Mechanical energy.
C) Chemical energy.
D) Sound energy.

Answer --> C


354) A form of chemical heat energy that occurs when a material increases in temperature without the addition of external heat is called –

A) Self–heating.
B) Spontaneous ignition.
C) Reactionary heating.
D) A and B.

Answer --> D


CodeRQ

Answer change from last version: Spontaneous heating changed to spontaneous ignition.
355) For spontaneous ignition to occur, all but which of the following factors are required?

A) The insulation properties of the material immediately surrounding the fuel must be such that the heat cannot dissipate as fast as it is being generated.
B) The rate of heat production must be great enough to raise the temperature of the material to its ignition temperature.
C) The rate of heat production must be proportional to the amount of fuel present.
D) The available air supply in and around the material being heated must be adequate to support combustion.

Answer --> C

"C" makes no sense at all.

356) The measure of a material's ability to transfer heat energy to other objects is known as –

A) Convection.
B) Conduction.
C) Radiation.
D) Temperature.

Answer --> D

The greater the energy, the higher the temperature. Measure of the average kinetic energy of the particles in a sample of matter, expressed in terms of units or degrees designated on a standard scale.

357) Resistance heating, overcurrent, arcing, and sparking are all examples of which type of heating?

A) Electrical heating.
B) Mechanical heating.
C) Conduction heating.
D) Reduction heating.

Answer --> A

358) A high temperature luminous electrical discharge across a gap or through a medium such as charred insulation would be considered –

A) Resistance heating.
B) Arcing.
C) Sparking.
D) Overcurrent.

Answer --> B


359) The heat that is produced when electrical current flows through a conductor is called –

A) Resistance heating.
B) Arcing.
C) Sparking.
D) Overcurrent.

Answer --> A


360) Luminous particles formed and spattered away from a point of arcing is referred to as –

A) Resistance heating.
B) Arcing.
C) Sparking.
D) Overcurrent.

Answer --> C


361) When a current flowing through a conductor exceeds its design limits, it may overheat and present an ignition hazard. This type of heating is called –

(1) Overcurrent (2) Bleeding (3) Overload (4) Overheat

A) 1, 4.
B) 2, 4.
C) 1, 3.
D) 2, 3.

Answer --> C

362) All of the following materials would be considered spontaneous heating materials except –

A) Spandex and other synthetic cloths.
B) Charcoal.
C) Linseed oil-soaked rags.
D) Hay and manure.

Answer --> A


363) The heat energy that is generated by friction or compression is called –

A) Mechanical heat energy.
B) Resistance heat energy.
C) Automated heat energy.
D) Mechanized heat energy.

Answer --> A


364) The movement of two surfaces against each other creates –

A) Heat of compression.
B) Heat of friction.
C) Heat of resistance.
D) Heat of abrasion.

Answer --> B


365) __ is generated when a gas is compressed.

A) Heat of compression.
B) Vapor heating.
C) Vapor compression.
D) Heat of evaporation.

Answer --> A

366) Which statement regarding heat is NOT true?

A) The transfer of heat from one point or object to another is the basic concept of the study of fire behavior.
B) Heat moves from warmer objects to cooler objects.
C) The greater the temperature difference between two bodies, the lesser the transfer rate of heat will be.
D) The transfer of heat from one body to another is measured as energy flow over time.

Answer --> C


367) Heat can be transferred from one body to another by three mechanisms. Which would NOT be considered a mechanism of heat transfer?

A) Diffusion.
B) Conduction.
C) Convection.
D) Radiation.

Answer --> A


368) Physical flow or transfer of heat energy can be transferred from one body to another by direct contact of the two bodies, or by an intervening heat conduction medium. This would be known as –

A) Convection.
B) Radiation.
C) Conduction.
D) Absorption.

Answer --> C


369) Of all the choices below, which is the best conductor of heat?

A) Liquids.
B) Gases.
C) Fiberglass.
D) Metals.

Answer --> D

370) The transfer of heat by the movement of heated fluids or gases, usually in an upward direction is known as –

A) Conduction.
B) Convection.
C) Diffusion.
D) Radiation.

Answer --> B


371) Which statement regarding heat transfer is true?

A) The flow of heat is from the warmer area to the cooler area.
B) The flow of heat is from the cooler area to the warmer area.
C) Heat can be conducted through a vacuum.
D) All of the above can be correct under certain circumstances.

Answer --> A


372) Heat generated from the sun in the form of waves would be known as –

A) Conduction.
B) Convection.
C) Radiation.
D) Diffusion.

Answer --> C


373) You are in a basement of a building, the fire has heated up a pipe to such a high temperature that it has ignited a floor joist several yards away. This type of heat transfer would be known as –

A) Convection.
B) Conduction.
C) Radiation.
D) Indirect heating.

Answer --> B

374) There is a fire on the lower floor of a stairwell. The temperature in the stairwell increases to a level where the ceiling ignites several floors up. This is an example of –

A) Convection.
B) Conduction.
C) Radiation.
D) Indirect heating.

Answer --> A

Notes) Page 221, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

375) There is a fully involved structure fire in a residential neighborhood. The houses are so close together that there is a serious exposure problem. What form of heat transfer creates the greatest risk to the exposed structures?

A) Conduction.
B) Convection.
C) Radiation.
D) Absorption.

Answer --> C


376) The radiation of heat is the transmission of energy as an electromagnetic wave, without an intervening medium. Which of the following would also be considered examples of electromagnetic waves?

A) Light waves.
B) Radio waves.
C) X-rays.
D) All the above.

Answer --> D


377) Materials that absorb heat but do not participate actively in a combustion reaction are known as –

A) Active agents.
B) Passive agents.
C) Heating agents.
D) Reactive agents.

Answer --> B

378) The fuel that is being oxidized or burned during combustion is referred to as a –

A) Reducing agent.
B) Oxidizing agent.
C) Organic agent.
D) Inorganic agent.

Answer --> A


379) Fuel is found in which of the following states of matter?

A) Gas.
B) Solid.
C) Liquid.
D) All the above.

Answer --> D


380) Which of the following forms of matter will burn?

A) Gases.
B) Liquids.
C) Solids.
D) All the above.

Answer --> A


Thermal energy is required to change solids and liquids into the gaseous state.

381) The weight of a given volume of pure vapor or gas compared to the weight of an equal volume of dry air at the same temperature and pressure is known as –

A) Vapor density.
B) Vapor pressure.
C) Vapor expansion rate.
D) Vapor volume.

Answer --> A

CodeRQ
382) Most gases are heavier than air, however, there are exceptions. Which of the following gases has a vapor density which makes it lighter than air?

A) Methane.  
B) Ethane.  
C) Propane.  
D) Butane.  

Answer --> A


The vapor density of methane is 0.55.  
The vapor density of propane is 1.52.  
The vapor density of carbon monoxide is 0.96. Carbon monoxide is slightly lighter than air which will give it a tendency to rise in a very still ambient airflow.

383) You are called to a home where there is a smell of gas inside the residence. After speaking to the home owner he tells you that his gas grill propane tank was leaking inside his kitchen. You are told by the IC to attempt to remove the remaining gas with a ventilation fan. Where should you position the fan?

A) In a window on the highest level of the residence.  
B) Outside the kitchen door blowing into the home.  
C) Mounted high on a jack on the kitchen doorway blowing out.  
D) Right of the threshold of the doorway blowing out.  

Answer --> D


Since propane is heavier than air it will fall to the lower levels of the room. Positioning the ventilation fan on the floor will be more effective than positioning at higher levels.

384) You are called to a two story residence for a carbon monoxide call. The Captain hands you the meter and tells you to meter the entire residence. Where would you expect to find the highest readings?

A) In the basement.  
B) On the first floor.  
C) In the stairway leading to the second floor.  
D) On the second floor.  

Answer --> D


Carbon monoxide has a vapor density of 0.96, and therefore its vapor density makes it just a little lighter than air. Because of this fact the CO gas will rise to the highest level in the residence. CO detectors should be placed at the highest level in the residence and always remember to meter the second story, even if the source of the CO is in the basement.
385) The ratio of the mass of a given volume of a liquid compared to its mass of an equal volume of water at the same temperature is called –

A) Mass.  
B) Volume.  
C) Specific gravity.  
D) Weight.  

Answer --> C


386) The specific gravity of water equals.

A) 1  
B) 10  
C) 100  
D) 1000  

Answer --> A


387) Substances with a specific gravity greater than water will be –

A) Heavier than water.  
B) Lighter than water.  
C) Will have a value greater than 1  
D) A and C.  

Answer --> D


388) The transformation of a liquid to vapor or gaseous state is known as –

A) Vaporization.  
B) Vapor pressure.  
C) Vapor expansion.  
D) Vapor density.  

Answer --> A

389) The pressure produced or exerted by vapors released by a liquid is known as –

A) Vaporization.
B) Vapor pressure.
C) Vapor expansion.
D) Vapor density.

Answer --> B


Vapor pressure is the measure of a tendency of a substance to evaporate. It is the pressure at which a vapor is in equilibrium with its liquid phase for a given temperature.

390) The minimum temperature at which a liquid gives off enough vapors to form an ignitable mixture with air near a liquid’s surface is called it’s –

A) Ignition point.
B) Fire point.
C) Flash point.
D) Ignitable point.

Answer --> C


391) The minimum temperature at which a liquid produces sufficient vapors to support combustion once the fuel is ignited is called it’s –

A) Ignition point.
B) Fire point.
C) Flash point.
D) Ignitable point.

Answer --> B


The fire point is usually a few degrees above the flash point.

392) Most ignitable liquids –

A) Have a specific gravity less than one.
B) Have a higher density than water.
C) Are polar solvents.
D) Are not flammable.

Answer --> A

393) Which would be considered a polar solvent?

A) Ethanol.  
B) Gasoline.  
C) Fuel oil.  
D) Diesel.  

Answer --> A  


Polar solvents will mix well with water. Hydrocarbon fuels are lighter than water and will not mix with water. Diesel, fuel oil and gasoline are all hydrocarbons and will float on top of the water.

394) When considering solubility of a liquid fuel, which of the following would you expect to dissolve in water?

A) Polar solvents.  
B) Nonpolar solvents.  
C) Hydrocarbon liquids.  
D) All of the above.  

Answer --> A  


395) The degree to which a solid, liquid, or gas dissolves in a solvent is known as its --

A) Melting point.  
B) Solubility.  
C) Ionization point.  
D) Ionization quotient.  

Answer --> B  


396) __ describes materials that are capable of being mixed.

A) Miscible.  
B) Mixability.  
C) Polarity.  
D) Solubility.  

Answer --> A  

397) The chemical decomposition of a substance through the action of heat is known as –

A) Thermal breakdown.
B) Pyrolysis.
C) Turbo oxidation.
D) Vaporization.

Answer -->  B


398) The size of solid fuels significantly effects the ignitability of the fuel. In view of this, which of the following statements is true regarding a solid fuel's surface to mass ratio?

A) As the surface area decreases the ignitability increases.
B) As the surface area increases the ignitability decreases.
C) As the surface area increases the ignitability increases.
D) None of the above – Surface area plays no role in the ignitability of a solid fuel.

Answer -->  C


399) The physical position of a fuel plays a role in the rate of pyrolysis. Fire will spread more rapidly when a solid fuel is in a __ position because of –

A) Horizontal / Radiation.
B) Vertical / Diffusion.
C) Vertical / Conduction.
D) All the above.

Answer -->  C


400) For wood, when does pyrolysis begin?

A) At temperatures below 400 degrees F.
B) At 850 degrees F.
C) Roughly around 1000 degrees F.
D) On or above 1300 degrees F.

Answer -->  A


CodeRQ
401) At which stage of pyrolysis will the majority of moisture already have been released and charring has begun?

A) Stage 1.
B) Stage 2.
C) Stage 3.
D) Stage 4.

Answer --> B


402) At which stage of pyrolysis will free burning of a wood material exist?

A) Stage 1.
B) Stage 2.
C) Stage 3.
D) Stage 4.

Answer --> D


403) The total amount of thermal energy that could be generated by the combustion reaction if a fuel were completely burned is known as –

A) Heat of combustion.
B) The heat release rate.
C) Exothermic work.
D) The pyrolysis rate.

Answer --> A


404) The energy released per unit of time as a given fuel burns is known as the –

A) Oxidizing rate.
B) Pyrolysis rate.
C) Exothermic work.
D) Heat release rate.

Answer --> D


The heat release rate often displayed as HRR is usually expressed in kilowatts. HRR is dependent on the type, quantity, and orientation of the fuel.
405) What is the primary oxidizing agent in most fires?

A) Fuels with large surface areas.
B) Fuels with small surface areas.
C) The oxygen contained and released within the fuel.
D) Oxygen in the atmosphere.

Answer --> D


406) At room temperature (70 degrees F or 21 degrees C), what is the minimum concentration of atmospheric oxygen that will support combustion?

A) 21%.
B) 14%.
C) 10%.
D) 8%.

Answer --> B


Research also shows however, that in compartment fires, as temperatures increase, lower concentrations of oxygen are needed to support flaming combustion.

407) Oxygen enriched atmospheres are atmospheres –

A) With concentrations of oxygen that exceed 23.5%.
B) With concentrations of oxygen that are below 21%.
C) That contain oxygen, no matter what the concentration is.
D) That lack any trace of oxygen.

Answer --> A


408) Which would not be considered a common oxidizer?

A) Calcium Hypochlorite.
B) Hydrogen Peroxide.
C) Noble Gases.
D) Methyl Ethyl Ketone Peroxide.

Answer --> C


Noble gases are inert.
409) According to OSHA any atmosphere having less than __ oxygen in the air as being oxygen
deficient and a hazard to firefighters not wearing SCBA.

A) 17.5%.
B) 18.5%.
C) 19.5%.
D) Any concentration under 21%.

Answer --> C


410) In which of the following occupancies may you expect to find oxygen enriched
atmospheres?

A) Hospitals and health care facilities.
B) Industrial occupancies.
C) Private homes.
D) All the above.

Answer --> D


Many private homes have oxygen supplies for breathing equipment for patients with respiratory
problems. Always be alert for this potential hazard.

411) In order for combustion to occur, a fuel must be converted into a gaseous state. The
range between the upper flammable and lower flammable limit in which a substance can be
ignited is known as the –

A) Explosive range.
B) Flammable range.
C) Combustion range.
D) A and B only.

Answer --> D


412) What would be the flammable range of propane?

A) 5% – 15%.
B) 2.1% – 9.5%.
C) 1.4% – 7.4%
D) 3.3% – 19%

Answer --> B


Knightlite added these questions not for the purpose that you should really memorize these
values, but rather to point out that the LFL levels are really quite low. As a firefighter you
should be aware that it does not take much material leaking to be put in a dangerous situation.
413) What would be the flammable range of gasoline?

A) 5% – 15%.
B) 2.1% – 9.5%.
C) 1.4% – 7.4%.
D) 3.3% – 19%

Answer --> C


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414) What would be the flammable range of methane?

A) 5% – 15%.
B) 2.1% – 9.5%.
C) 1.4% – 7.4%.
D) 3.3% – 19%

Answer --> A


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415) What would be the flammable range of Ethanol?

A) 5% – 15%.
B) 2.1% – 9.5%.
C) 1.4% – 7.4%.
D) 3.3% – 19%

Answer --> D


Knightlite added these questions not for the purpose that you should really memorize these values, but rather to point out that the LFL levels are really quite low. As a firefighter you should be aware that it does not take much material leaking to be put in a dangerous situation.
416) Some extinguishing agents such as Halon interrupts the flame-producing chemical reaction and terminates the combustion reaction. This can best be described as –

A) Extinguishment by temperature reduction.
B) Extinguishment by fuel removal.
C) Extinguishment by oxygen dilution.
D) Extinguishment by chemical flame inhibition.

Answer --> D


417) Which of the following potential fuel packages would you estimate to have the LOWEST HRR?

A) Mattress (polyurethane foam).
B) Gasoline/kerosene (2 sq. ft. pool).
C) Small wastebasket.
D) Christmas Tree (dry).

Answer --> C


A small wastebasket would have an HRR of 4 to 18 kW. In contrast a dry Christmas tree would have an HRR of 500 to 650 kW. A polyurethane easy chair has an HRR of 1352 to 1900 kW. Remember HRR means heat release rate.

418) Smoke generated from a fire contains toxic or asphyxiant gases. Which of the following would NOT be considered one such gas?

A) Hydrogen cyanide (HCN)
B) Carbon monoxide (CO)
C) Water vapor (H2O)
D) Carbon dioxide (CO2)

Answer --> C


419) The most common hazardous material contained in smoke is –

A) Hydrogen cyanide (HCN).
B) Carbon monoxide (CO).
C) Water vapor (H2O).
D) Carbon dioxide (CO2).

Answer --> B

420) Which compound acts as a chemical asphyxiant by binding with hemoglobin in the blood?

A) Carbon monoxide.
B) Carbon dioxide.
C) Carbon trioxide.
D) Hydrogen cyanide.

Answer --> A


CO combines more than 200 times as quickly with hemoglobin as oxygen, thus drastically decreasing the blood's ability to carry oxygen.

421) Which compound acts as a chemical asphyxiant by preventing the body from using oxygen at the cellular level?

A) Carbon monoxide.
B) Carbon dioxide.
C) Carbon trioxide.
D) Hydrogen cyanide.

Answer --> D


HCN (hydrogen cyanide) is a byproduct in the combustion of polyurethane foam, which is commonly used in furniture and bedding.

422) Which compound is a product of complete combustion of organic materials?

A) Carbon monoxide.
B) Carbon dioxide.
C) Carbon trioxide.
D) Hydrogen cyanide.

Answer --> B


Carbon dioxide is considered a simple asphyxiant in that it displaces oxygen. CO2 also acts as a respiratory stimulant, by increasing the respiratory rate.
423) Class A fires are fires involving ordinary combustible materials such as all of the following except –

A) Paper.
B) Wood.
C) Gasoline.
D) Plastic.

Answer --&gt; C


Class A fires involve combustible solids. Gasoline is a liquid, and would therefore be a Class B fire.

424) Water is commonly used to extinguish Class A fires by cooling the material below its ignition temperature. Class A foams are used to enhance water’s ability to extinguish Class A fires by –

A) Reducing the water surface tension allowing it to penetrate more easily into the burning material.
B) Increasing the water surface tension so that the water beads up on the ignited material sealing the material off from oxygen.
C) Reducing the temperature of the water, which enhances the cooling effect of the liquid.
D) Class A foams are never used on Class A fires.

Answer --&gt; A


425) All of the following materials would be classified as a Class B fire except –

A) Burning Lacquer.
B) Burning Alcohol.
C) Burning Rubber.
D) Burning Paint.

Answer --&gt; C


Class B fires involve flammable liquids. Rubber is a solid and therefore would come under Class A.
426) Which is the most effective method of extinguishing a Class B fire?

A) Cooling the fire with water.
B) Removing the fuel from the fire.
C) Enhancing the chain reaction.
D) Inhibiting the chain reaction.

Answer --> D


427) Energized electrical equipment and household appliances would be classified as –

A) Class A fires.
B) Class B fires.
C) Class C fires.
D) Class D fires.

Answer --> C


428) The safest way to fight a class C fire is to –

A) Cool the fire with a 45 degree fog stream of water.
B) De-energize the source and then treat the fire as a Class A or Class B fire.
C) Use a dry chemical extinguisher.
D) Use a carbon dioxide or halon extinguisher.

Answer --> B


429) Class D fires are those that involve combustible metals. Which of the following would NOT be considered a combustible metal?

A) Carbon.
B) Potassium.
C) Magnesium.
D) Sodium.

Answer --> A

430) Which extinguishing agent should never be used to extinguish a Class C fire?

A) Water.  
B) Halon.  
C) Carbon dioxide.  
D) Dry chemical.  

Answer --> A


Any extinguishing agent must not conduct electricity. Water conducts electricity.

431) Class B fuels would include all of the following except –

A) Liquids.  
B) Greases  
C) Gases.  
D) Garbage.  

Answer --> D


Garbage would be considered a Class A fuel.

432) Anything that occupies space and has mass is known as –

A) A solid.  
B) A physical entity.  
C) A potential energy source.  
D) Matter.  

Answer --> D


433) ___ is the capacity to perform work; occurs when a force is applied to an object over a distance, or when a chemical, biological, or physical transformation is made in a substance.

A) Energy.  
B) Power.  
C) Joule.  
D) All the above.  

Answer --> A

All Chapters

434) Materials produced and released during burning best describes which of the following?

A) Smoke.
B) Fire gases.
C) Products of ignition.
D) Products of combustion.

Answer --> D


435) The result of exothermic reactions, occurring spontaneously in some materials under certain conditions, whereby heat is generated at a rate sufficient to raise the temperature of the material is known as –

A) Self–heating.
B) Spontaneous heating.
C) Spontaneous ignition.
D) Spontaneous combustion.

Answer --> A


436) A (An) __ is defined as a fire that occurs within an enclosed room or space within a building.

A) Structure fire.
B) Partition fire.
C) Enclosure fire.
D) Compartment fire.

Answer --> D


437) __ describes the condition in which all four elements of the fire tetrahedron come together and combustion begins.

A) Flashover.
B) Decay.
C) Ignition.
D) Growth.

Answer --> C


Ignition is the process of initiating self-sustained combustion.
438) In compartment fires, when the fuel available to burn is limited, the fire is said to be __. Likewise, if the amount of available oxygen is limited, the condition is known as –

A) Heat controlled, oxygen limited.
B) Fuel controlled, oxygen limited.
C) Fuel controlled, ventilation controlled.
D) Heat controlled, ventilation limited.

Answer --> C


439) Linseed oil rags igniting would be an example of which of the following?

A) Piloted ignition.
B) Autoignition.
C) Ignition by spark.
D) Ignition by flame.

Answer --> B


Answer Change: Nonpiloted ignition changed to autoignition.

440) Piloted ignition is caused by –

A) Spontaneous ignition.
B) Convection.
C) A spark or flame.
D) Conduction.

Answer --> C


441) The first stage of the burning process in a confined space in which the substance being oxidized is producing heat is called the –

A) Decay stage.
B) Ignition stage.
C) Growth stage.
D) Incipient stage.

Answer --> D


During the incipient stage of a fire the oxygen content in the air has not been significantly reduced.
442) After a compartment fire has become ignited, a fire plume begins to develop above the burning fuel. As the plume develops it begins to draw air in from the surrounding space into the column. Which stage of fire development does this best describe?

A) Incipient.
B) Growth.
C) Flashover.
D) Fully developed.

Answer --> A


443) As a fire plume develops, it entrains air from the surrounding space into the column. The air moving into the plume has an overall cooling effect on the temperatures within the plume. Taking this into consideration, where would you expect within a compartment fire, that the temperatures within the plume would be at the hottest temperatures?

A) Fuel packages in the center of the compartment unobstructed by walls.
B) Fuel packages next to walls of the compartment.
C) Fuel packages in corners of the compartment.
D) All fuel packages will yield plumes with equal temperatures.

Answer --> C


Fuel packages in corners of the container have less air available to cool the plume, thus temperatures are higher.

444) When a fire is ignited by a spark or a flame it is referred to as a –

A) Piloted ignition.
B) Nonpiloted ignition.
C) Spontaneous combustion.
D) Direct ignition.

Answer --> A


445) As a fire progresses from ignition to decay, which of the following factors will affect its behavior and development within a compartment?

A) The volume and ceiling height of the compartment as well as the thermal properties of the enclosure.
B) Ventilation and changes in ventilation.
C) Ambient conditions, fuel type, and the availability and location of additional fuel.
D) All the above

Answer --> D

446) During the incipient stage of a fire hot gases begin to spread horizontally across the ceiling of a compartment. This is called –

(1) Rollover (2) Mushrooming (3) Ceiling Jet (4) Flameover

A) 1, 4.  
B) 1, 2.  
C) 2, 3.  
D) 3, 4.

Answer -> C


Ceiling jet is the scientific or engineering term for mushrooming. This complex process of heat transfer begins to increase the overall temperature of the room.

447) At which stage of a fire is fuel and oxygen virtually unlimited, and is characterized by the rapid release of heat?

A) Incipient.  
B) Growth.  
C) Flashover.  
D) Fully developed.

Answer --> B


448) _ is the transition between the growth and fully developed fire stages, and is not a specific event, such as ignition. Broadly defined as the temperature inside a compartment that results in the simultaneous ignition of all combustible contents in the space.

A) Backdraft.  
B) Rollover.  
C) Flameover.  
D) Flashover.

Answer --> D

All Chapters

449) At what stage of fire development do burning fuels in a compartment fire, release their maximum amounts of heat possible from the available fuel packages, and produce large volumes of fire gases?

A) Ignition.  
B) Growth.  
C) Fully Developed.  
D) Decay.  

Answer -->  C


450) __ occurs where flames move through or across the unburned gases at the top of a compartment during a fire's progression.

A) Flashover.  
B) Backdraft.  
C) Rollover.  
D) Mushrooming.  

Answer -->  C


CodeRQ

Rollover may occur during the growth stage of a fire, as a hot-gas layer forms near the ceiling of the compartment.

451) Rollover differs from flashover in that –

A) Only the flammable gases are burning and not the room contents.  
B) Only the room contents are burning and not the flammable gases.  
C) Rollover is not a dangerous situation for firefighters and flashover is.  
D) Rollover will continue even though the main body of the fire has been extinguished.  

Answer -->  A


452) In a normal structure fire, heat is stratified in what is called thermal layers within a room, with the hottest gases rising to the top of the room, and the cooler air accumulating near the floor. What mistakes can firefighters make that may cause a thermal imbalance to the thermal layering of the room?

A) Ventilating the structure before applying water to the fire.  
B) Improperly applying water to the fire and not ventilating the room.  
C) Directing the water stream towards the base of the fire in a ventilated room.  
D) All of the above.  

Answer -->  B

453) The intense heat produced during flashover can result in firefighter disorientation as well as thermal burns.
Firefighter Jim says that the most effective way for firefighters to manage this risk is by maintaining an awareness of developing fire conditions.
Firefighter Paul says that the most effective way for firefighters to manage this risk is by controlling the fire environment through effective fire control and ventilation tactics.
Firefighter Joe says that the most effective way for firefighters to manage this risk is by training flashover survival techniques.
Who is correct?
A) Firefighter Jim.
B) Firefighter Paul.
C) Firefighter Joe and Paul.
D) Firefighter Jim and Paul.

Answer -->  D


You must be aware of your environment and the ever-changing or deteriorating conditions within the fire room. Don't put yourself in a position where you will be caught in a flashover. Manage this risk by controlling the environment. Don't let the environment control you.

454) One of the most important physical properties that a firefighter should know about smoke is that smoke is –
A) The product of incomplete combustion.
B) Toxic.
C) High in carbon monoxide.
D) Unburned fuel that is ready to ignite.

Answer -->  D


Everyone knows that smoke is toxic and contains a high concentration of carbon monoxide, but what firefighters forget is that smoke is unburned fuel that is ready to ignite. A smoky condition can rapidly escalate to a flashover condition.

455) At which of the following temperatures can a flashover occur?
A) 900 degrees F.
B) 1150 degrees F.
C) 1200 degrees F.
D) All the above.

Answer -->  D


CodeRQ

There is no exact temperature associated with the occurrence of flashover. Typically, flashover will occur in ceiling temperatures reach 1100 degrees F.
456) At what stage of a fire does oxygen concentrations fall to the point where flaming combustion can no longer be supported?

A) Decay stage.
B) Ventilation stage.
C) Oxygen limiting stage.
D) Fuel limiting stage.

Answer --> A


During the decay stage the fire goes from ventilation controlled to fuel controlled. Combustion can not be supported if there is no fuel to burn.

457) Initiation of combustion of a material by an internal chemical or biological reaction that has produced sufficient heat to ignite the material is known as –

A) Self–heating.
B) Self–ignition.
C) Delayed heating.
D) Spontaneous ignition.

Answer --> D


458) The instantaneous explosion or rapid burning of superheated gases that occurs when oxygen is introduced into an oxygen–depleted confined space is known as a –

A) Backdraft.
B) Flashover.
C) Rollover.
D) Flameover.

Answer --> A


459) Which are typical characteristics of a potential backdraft?

A) Black smoke becoming dense gray yellow, with little or no visible flame.
B) Smoke leaving the structure in puffs or intervals.
C) Pressurized smoke exiting through small openings.
D) All the above.

Answer --> D


Other indicators of backdraft would include little or no visible flame, inward drawn smoke, smoke stained windows, and heat–induced cracking of glass.
460) A method to help prevent backdraft from occurring is to -

A) Open the structure at the lowest point involved.
B) Open the structure at the highest point involved.
C) Break all windows at the level of involvement before entering the structure.
D) All the above.

Answer ---> B


461) Firefighter Jon says that backdraft will always occur immediately or soon after making an opening into a building or involved compartment. Firefighter Liz says that the mixing of hot, flammable products of combustion with the air through the action of gravity currents, pressure differential, and wind effects sometime takes some time. Firefighter Mike says that firefighters should delay entry until actions are taken to change conditions inside the building or compartment. Who is correct?

A) Firefighter Jon and Liz.
B) Firefighter Liz and Mike.
C) Firefighter Jon and Mike.
D) They are all correct.

Answer ---> B


Never assume that backdraft will always occur immediately after an opening is made in a building or involved compartment. Gases should be cooled with hose streams and the structure should be ventilated with vertical ventilation.

462) Which statement is NOT true?

A) A fire may be extinguished by reducing oxygen content using an inert gas.
B) A fuel can be separated from air by blanketing it with foam.
C) Reducing the oxygen content in the area will assist in extinguishing the fire.
D) Self-oxidizing fuels can easily be extinguished by oxygen dilution.

Answer ---> D

463) A broken natural gas line is on fire. Your engine company turns off the shut off valve, thus extinguishing the fire. This is an example of which of the following fire extinguishing methods?

A) Temperature reduction.
B) Fuel removal.
C) Oxygen exclusion.
D) Chemical flame inhibition.

Answer --> B


464) You walk into your kitchen to find a pan of cooking oil in flames on your stove. You quickly cover the pan with its lid. This is an example of which fire extinguishing method?

A) Temperature reduction.
B) Fuel removal.
C) Oxygen exclusion.
D) Chemical flame inhibition.

Answer --> C


465) If a fire is in the smoldering phase of combustion, which of the following is not an option for extinguishing the fire?

A) Reduction of temperature.
B) Reduction of fuel.
C) Elimination of oxygen.
D) Elimination of fuel.

Answer --> B


466) One of the most common methods of extinguishing fires is –

A) Temperature reduction by cooling with water.
B) Fuel removal.
C) Oxygen reduction.
D) Chemical flame inhibition.

Answer --> A

467) All of the following extinguishing agents act by chemical flame inhibition except –

A) Dry Chemical.
B) Carbon Dioxide.
C) Halon-replacement agents.
D) Halogenate agents.

Answer -->  B

Carbon dioxide extinguishers work by oxygen exclusion.

468) The tendency or capacity to remain afloat in a liquid or rise in a gas is known as –

A) Plume.
B) Ceiling Jet.
C) Mushrooming.
D) Buoyant.

Answer -->  D


469) At what temperature does water turn to steam?

A) 100 degrees F.
B) 145 degrees F.
C) 212 degrees F.
D) 245 degrees F.

Answer -->  C

Remember water can scald at 145 degrees F.

470) When water is converted to steam it expands approximately ___ times.

A) 170.
B) 1700.
C) 17000.
D) 170000.

Answer -->  B

471) ___ is composed of at least one inlet opening, one exhaust opening, and the connecting volume between the openings.

A) Flow channel.
B) Convection path.
C) Open compartment.
D) Flow path.

Answer -->  D


The direction of the flow is determined by difference in pressure. Heat and smoke in a high-pressure area will float towards the area of low pressure.

472) The buoyant layer of hot gases and smoke produced by a fire in a compartment is called the –

A) Upper layer.
B) Radiant layer.
C) Radiation layer.
D) High-heat layer.

Answer -->  A


473) A petroleum-based organic compound that contains only hydrogen and carbon is known as a –

A) Hydrogenous fuel.
B) Carbonaceous fuel.
C) Hydrocarbon fuel.
D) Polar solvent.

Answer -->  C


474) A liquid having a flashpoint at or above 100 degrees F and below 200 degrees F is known as a(an) –

A) Combustible liquid.
B) Unstable liquid.
C) Flammable liquid.
D) Inflammable liquid.

Answer -->  A

475) At normal oxygen levels, Nomex does not burn, however when placed in an oxygen-enriched atmosphere of approximately ____ oxygen, it will burn vigorously.

A) 22%.
B) 26%.
C) 29%.
D) 31%.

Answer -->  D


476) Molecular fragments that are highly reactive are called –

A) Electrons.
B) Neutrons.
C) Molecular particles.
D) Free radicals.

Answer -->  D


477) All buildings exchange air inside the structure with the air on the outside of the structure in which of the following ways?

A) Constructed opening such as windows, doors, and passive ventilation devices.
B) Leakage through cracks and other gaps in the construction.
C) Heating, ventilating, and air conditioning HVAC systems.
D) All the above.

Answer -->  D


478) The thermal properties of a compartment can contribute to the rapid spread of fire throughout the compartment. These thermal properties can also make extinguishing more difficult and reignition possible. Which of the following elements contains heat within the compartment causing a localized increase in temperature and fire growth?

A) Heat reflectivity.
B) Heat absorption.
C) Insulation.
D) Retention.

Answer -->  C

479) The thermal properties of a compartment can contribute to the rapid spread of fire throughout the compartment. These thermal properties can also make extinguishing more difficult and reignition possible. Which of the following elements maintains temperature by absorbing and releasing large amounts of heat slowly?

A) Heat reflectivity.
B) Heat absorption.
C) Insulation.
D) Retention.

Answer --> D


480) The thermal properties of a compartment can contribute to the rapid spread of fire throughout the compartment. These thermal properties can also make extinguishing more difficult and reignition possible. Which of the following elements increases fire spread through the transfer of radiant heat from wall surfaces to adjacent fuel sources?

A) Heat reflectivity.
B) Heat absorption.
C) Insulation.
D) Retention.

Answer --> A


481) The outcome of combustion is a confined space in which gas is tend to form into layers, according to temperature, with the hottest gases found at the ceiling in the coolest gases at the floor. This phenomenon is called –

A) Thermal plateau.
B) Thermal stratification.
C) Thermal plane.
D) Thermal layering.

Answer --> D

Notes) Page 244, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

482) Which statement regarding the role of ambient conditions on fire development are true?

A) High humidity can impede the natural movement of smoke.
B) Cold temperatures can impede the natural movement of smoke.
C) Wind speed and direction can be extremely significant in fire development.
D) All the above.

Answer --> D

483) The level at a compartment opening where the difference in pressure exerted by expansion and buoyancy of hot smoke floating out of the opening in the inward pressure of cooler, ambient temperature air flowing in through an opening is equal is known as –

A) Neutral plane.
B) Thermal plane.
C) Equilibrium plane.
D) Ambient plane.

Answer --> A

Notes) Page 244, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

484) Over the years, the fire service has coin words and phrases to describe various fire events that result in rapid fire development. These would include all the following but –

A) Flashover.
B) Mushrooming.
C) Backdraft.
D) Smoke explosion.

Answer --> B


Although mushrooming is a term used in the fire service, it does not describe rapid fire development.

485) Sometimes during a fire, the wind can increase the pressure inside a structure, and thus drive smoke and flames into unburned portions of the container and on to advancing firefighters, which can upset tactical ventilation efforts. This would be an example of –

A) Natural ventilation.
B) Forced ventilation.
C) Unplanned ventilation.
D) Positive pressure ventilation.

Answer --> C


486) Wind-driven conditions can occur in almost any type of structure. Wind speeds as low as ____ can create wind-driven conditions.

A) 10 mph.
B) 15 mph.
C) 20 mph.
D) 25 mph.

Answer --> A

487) Planned, systematic, and coordinated removal of heated air, smoke, gases or other airborne contaminants from a structure, replacing them with cooler and/or fresher air to meet the incident priorities of life safety, incident stabilization, and property conservation is known as –

A) Preplanned ventilation.
B) Strategic ventilation.
C) Planned ventilation.
D) Tactical ventilation.

Answer -->  D


488) Which of the following would not be considered part of a firefighter's personal protective equipment?

A) Protective hoods, hearing protection, and eye protection.
B) Helmet, gloves, turnout coat and bunker pants.
C) Pocket spanner wrench, escape rope, and flashlight.
D) SCBA and PASS system.

Answer -->  C


Although this equipment is extremely handy, it's not necessarily part of the firefighter's personal protective equipment.

489) Which NFPA standard is the Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting?

A) NFPA 1971.
B) NFPA 1900.
C) NFPA 1001.
D) NFPA 1981.

Answer -->  A


This NFPA standard addresses the requirements for helmets, coats, trousers, boots, eye protection, protective gloves, and protective hoods. It requires that all components must include a permanent label that shows compliance with the standard (See Figure 6.3).

The label contains the following statement:

THIS STRUCTURAL FIRE FIGHTING PROTECTIVE (name of component) MEETS THE (name of component) REQUIREMENTS OF NFPA® 1971, (current edition) EDITION.
490) Although the traditional function of the fire helmet was to shed water, the primary purpose of the helmet includes all but which of the following?

A) Protect the firefighter from heated or scalding water and embers from reaching the ears and neck.
B) Protect the firefighter from heat and cold.
C) Protect the firefighter from cranial impact.
D) Identify the firefighters rank.

Answer --> D


491) Safety glasses and goggles protect against __ of all eye hazards.

A) 75%.
B) 85%.
C) 95%.
D) 100%.

Answer --> B


492) Hearing protection should be used by firefighters in the United States if exposed to noise levels of –

A) 80 dBa.
B) 85 dBa.
C) 90 dBa.
D) 95 dBa.

Answer --> C


The level in Canada is 85 dBa.
493) The most common use of ear protection for firefighters, is to protect the firefighter’s hearing while –

A) Riding apparatus that exceeds the maximum noise exposure levels.
B) Using gasoline powered machinery.
C) Performing interior fire fighting operations.
D) All the above.

Answer --> A


When riding apparatus, the noise exceeds maximum noise exposure levels (90 decibels in the U.S., 85 decibels in Canada).

494) Protective hoods are designed to protect which part of the firefighter's body from extreme heat?

A) Ears.
B) Neck.
C) Face.
D) All the above.

Answer --> D


Protective hoods protect the firefighter from exposure to heat, embers, and debris. These hoods cover areas that may not be protected by the SCBA facepiece, helmet, ear flaps, or coat collar.

495) Protective hoods are NOT made from which of the following materials?

A) Nomex.
B) PBI.
C) Cotton.
D) Kevlar.

Answer --> C


Firefighter hoods are typically made of fire-resistant material which are available with long or short skirts (See Figure 6.8). You should tuck the skirts inside the protective coat, thus forming a continuous layer of protection.
496) NFPA 1971 requires that all turn out coats be made using __ layers.

A) 2  
B) 3  
C) 4  
D) 5

Answer --> B


They include three components: the outer shell, moisture barrier, and thermal barrier (See Figure 6.9).

497) The most interior layer of a turnout coat protects the firefighter from –

A) Severe heat.  
B) Moisture.  
C) Cuts and abrasions.  
D) Corrosive liquids.

Answer --> A


This layer can also keep the firefighter warm in cold weather.

498) A built–in harness and hand loop at the back of the neck that permits a rescuer to grab an drag a downed firefighter is called a –

A) Firefighter Drag Loop (FDL).  
B) Drag Rescue Device (DRD).  
C) Rescue Loop (RL).  
D) Downed Firefighter Loop (DFL).

Answer --> B


499) Which is the least important characteristic of gloves, in relation to their role in firefighter personal protection?

A) The ability of the gloves to protect against heat and cold.  
B) The ability of the gloves to be resistant to cuts and punctures.  
C) The ability of the gloves to be resistant to absorption of liquids.  
D) The ability of the gloves to offer maximum dexterity.

Answer --> D


Your gloves must allow enough dexterity and tactile feel for you to perform your job effectively. You have to be able to grasp tools and nozzles or manipulate small objects such as control knobs on portable radios.
500) Which NFPA standard is the Standard on Protective Clothing and Equipment for Wildland Fire Fighting?

A) NFPA 1971.
B) NFPA 1972.
C) NFPA 1975.
D) NFPA 1977.

Answer --> D


501) It is recommended that wildland firefighters wear underwear made of –

A) 100% Cotton.
B) 50% Cotton, 50% Nomex.
C) 75% Nomex, 25% PBI.
D) 100% Gore-Tex.

Answer --> A


Wearing underwear made of synthetic materials, such as nylon or polyester, when fighting a wildland fire may cause the material to melt when heated and can stick to your skin, causing serious burns.

502) Which fabric would be considered unsuitable to be worn by firefighters?

A) Cotton.
B) Nomex.
C) PBI.
D) Spandex.

Answer --> D


Cotton is the recommended fabric.

503) Which statement regarding personal protective equipment is NOT true?

A) Polycarbonate helmets that have come in contact with hydraulic oil should be taken out of service and checked for any weakening.
B) A dirty outer shell of the turnout coat will be more fire resistant than a clean one.
C) Structure fire fighting gear is generally too bulky, too hot, and too heavy to be practical for wildland fire fighting.
D) The second layer of a firefighter's protective coat is to act as a moisture barrier.

Answer --> B


Hydrocarbon contamination will reduce the fire resistance of your gear, thus it is important to always keep it clean and free of such contaminants.
NFPA 1851 defines four types of cleaning for personal protective clothing. They include 'Routine Cleaning' as well as all of the following except –

A) Advanced cleaning.
B) Specialized cleaning.
C) Disinfected cleaning.
D) Contact cleaning.

Answer --> C

The type of cleaning is determined by the amount and type of contamination and whether the equipment must be removed from service to perform the cleaning.

Which of the following would be considered common respiratory hazards?


A) 1, 3.
B) 1, 2, 4.
C) 1, 2, 3, 4.
D) 1, 2, 3, 4, 5.

Answer --> D

A condition caused by a deficiency in the amount of oxygen reaching the body tissues is referred to as –

A) Respiratory compromise.
B) Pulmonary Edema.
C) Hypoxia.
D) Asphyxiation.

Answer --> C

Hypoxia is defined as a potentially fatal condition caused by a lack of oxygen.
507) The accumulation of fluids in the lungs is known as –

A) Respiratory compromise.
B) Pulmonary Edema.
C) Respiratory arrest.
D) Asphyxiation.

Answer -->  B


Pulmonary edema can cause death from asphyxiation. The effects of tissue damage from inhaling hot air is not immediately reversible by introducing cool fresh air.

508) A condition that causes death because of a deficient amount of oxygen and excessive amount of carbon monoxide and/or other gases in the blood is known as –

A) Hypoxia.
B) Respiratory shutdown.
C) Respiratory arrest.
D) Asphyxiation.

Answer -->  D


509) At what concentration of atmospheric oxygen will a firefighter experience a decrease in the ability to perform strenuous work along with impaired coordination?

A) 21%.
B) 15 to 19%.
C) 12 to 14%.
D) 10 to 12%.

Answer -->  B


510) At what concentration of atmospheric oxygen content will a firefighter experience dizziness, headache, and rapid fatigue?

A) 21%.
B) 15 to 19%.
C) 10 to 12%
D) 8 to 10%.

Answer -->  C


CodeRQ
511) Unconsciousness will result at what concentration of atmospheric oxygen?

A) 17%.
B) 15 to 19%.
C) 10 to 12%.
D) 8 to 10%.

Answer --> D


This exposure also results in mental failure, ashen face, blueness of the lips, nausea, and vomiting.

512) At what percentage of atmospheric oxygen will cause coma within 40 seconds followed by death?

A) 12%.
B) 10%.
C) 8%.
D) 6%.

Answer --> D


513) Which of the following gases are responsible for most of the fire related fatalities?


A) 1, 3.
B) 5, 6.
C) 2, 3, 4.
D) 2, 3, 5, 6.

Answer --> B


HCN can be inhaled, ingested, or absorbed into the body, and targets the heart and brain.

CO attaches to hemoglobin about 200 times more effectively than oxygen does. Carbon monoxide excludes oxygen from the blood, leading to hypoxia of the brain and tissues, followed by death if the process is not reversed.
514) Firefighters are exposed to a greater range and concentration of hazards than the general public, and they have a higher likelihood of several types of cancers because of that exposure. In fact, firefighters are ___ times more likely to develop kidney cancer than the general public.

A) 2  
B) 3  
C) 4  
D) 5

Answer -->  C


515) A(An) ____ Atmosphere contains less than the normal 19.5 percent oxygen. At least 16 percent oxygen is needed to produce flames or sustain human life.

A) Oxygen-deficient.  
B) Hypoxic  
C) Carbon monoxide.  
D) Hydrogen cyanide.

Answer -->  A


Normal atmospheric air contains 21% oxygen.

516) Small particles that may be suspended in the air and are harmful to the respiratory system are called –

A) Particulate contaminants.  
B) Smoke.  
C) Toxic dust.  
D) All the above.

Answer -->  A


Particulates are very small particles of solid material, such as dust, that are suspended in the atmosphere.

517) Which of the following gases are colorless?

A) Carbon monoxide.  
B) Hydrogen chloride.  
C) Hydrogen cyanide.  
D) All of the above.

Answer -->  D

518) Which gas has a bitter almond odor?

A) Carbon monoxide.
B) Hydrogen chloride.
C) Hydrogen cyanide.
D) Phosgene.

Answer -->  C

Reference dropped from 6th edition, but question left in for reference.

519) Which of the following terms is characterized by activities required for rescue, fire suppression, and property conservation at fires that produce high radiant, conductive, or convective heat; includes aircraft, hazardous materials transport, and storage tank fires?

A) Structure firefighting.
B) Proximity firefighting.
C) Heavy rescue and extrication.
D) EMS operations.

Answer -->  B


520) Which of the following terms is characterized by activities required for rescue, fire suppression, and property conservation in structures, vehicles, vessels, and similar types of properties.

A) Rescue and extrication.
B) Proximity fire fighting.
C) Structural Fire Fighting.
D) Wildland firefighting.

Answer -->  C


521) Which gas is the end product of complete combustion of carboniferous materials?

A) Carbon dioxide.
B) Hydrogen chloride.
C) Carbon monoxide.
D) Phosgene.

Answer -->  A

522) Which gas is the end product of incomplete combustion?

A) Carbon dioxide.
B) Hydrogen chloride.
C) Carbon monoxide.
D) Phosgene.

Answer -->  C


523) What is the NFPA Standard on Fire Department Occupational Safety and Health Program?

A) NFPA 1981.
B) NFPA 1500.
C) NFPA 1501.
D) NFPA 1961.

Answer -->  B


All equipment must be designed and constructed based on NFPA's standards.

524) The danger of inhalation of CO is that it binds to hemoglobin ___ times more readily than does oxygen, thus precluding oxygen from the blood.

A) 50 times.
B) 100 times.
C) 200 times.
D) 300 times.

Answer -->  C


This term is called – Carboxyhemoglobin.

525) At what concentration in the air is carbon monoxide considered dangerous?

A) 0.005 percent.
B) 0.10 percent.
C) 1000 ppm.
D) B and C.

Answer -->  D


At these concentrations, unconsciousness can result after 1 hour.
526) Which of the following are signs and symptoms of carbon monoxide poisoning?

A) Headaches, and dizziness.
B) Unconsciousness after one hour.
C) Nausea and vomiting.
D) All the above.

Answer -->  D


527) At what concentration of CO can result in unconsciousness after 1 hour?

A) 100 ppm.
B) 400 ppm.
C) 800 ppm.
D) 1000 ppm.

Answer -->  D


528) Hydrogen Chloride (HCL) is a colorless gas, with a pungent odor, and is an intense irritant to mucous membranes. These gases are primarily released during fires as a result of the combustion of -

A) Wood.
B) Metal.
C) Plastics.
D) All of the above.

Answer -->  C


529) You are called to the scene of an interior aircraft fire which contains a great deal of polyurethane foam. What toxic gas should you be particularly concerned about?

A) Carbon dioxide
B) Hydrogen chloride
C) Hydrogen cyanide
D) Nitric oxide

Answer -->  C


You will also get hydrogen cyanide released at clothing stores, and rug shops.
530) Your engine company has been called to the scene of a supermarket, where a row of freezers are on fire. Which compound can you expect to be present?

A) Benzene.
B) Chlorine.
C) Toluene.
D) Phosgene.

Answer --> D

Phosgene is often produced when refrigerants such as freon come in contact with flame.

531) Which of the following compounds is often called "Silo Gas?"

A) Carbon monoxide.
B) Phosgene.
C) Nitrogen dioxide.
D) Carbon dioxide.

Answer --> C

It is listed under Nitrous gases, but no direct reference to Silo gas.

532) A 1.28% or 12,800 ppm concentration of carbon monoxide in the air will cause immediate unconsciousness, and danger of death within –

A) 2 minute.
B) 1 to 3 minutes.
C) 3 to 5 minutes.
D) 5 to 10 minutes.

Answer --> B


533) Which toxic gas may you expect to be stored at facilities where wood alcohol, ethylene, dry ice, or carbonated soft drinks are manufactured?

A) Carbon monoxide.
B) Carbon dioxide.
C) Nitrogen dioxide.
D) Hydrogen cyanide.

Answer --> B

534) Besides freon, which of the following would be considered dangerous refrigerants that irritate the respiratory track and eyes?

A) Ammonia.
B) Chlorine.
C) Sulfur dioxide.
D) A and C only.

Answer --> D

535) Which gas would you expect to find in a water treatment plant?

A) Chlorine gas.
B) Sulphur dioxide.
C) Nitrous oxide.
D) Hydrogen sulfide.

Answer --> A

536) HCN is ___ times more toxic than CO.

A) 10
B) 20
C) 27
D) 35

Answer --> D

537) All of the following factors affect a firefighter’s ability to use SCBA effectively except –

A) The firefighter must be in good physical condition and reasonably agile.
B) The firefighter must be well trained and confident about using SCBA.
C) The firefighter must be able to remain calm in stressful situations.
D) The firefighter uses soft contact lenses.

Answer --> D
538) Depending on the model, a SCBA can increase a firefighter's weight by as much as –

A) 10 lbs.
B) 15 lbs.
C) 20 lbs.
D) 35 lbs.

Answer --> D


The weight of SCBA units, average between 25 and 35 pounds (11 kg and 16 kg).

539) NFPA 1500 prohibits firefighters donning SCBA from –

A) Wearing soft contact lenses.
B) Wearing beards or facial hair that prevents a complete seal.
C) Wearing prescription glasses.
D) Sporting nose rings and other facial piercings.

Answer --> B


Wearing eyeglasses is also prohibited if the side frames pass through the seal area. Eyeglass kits are provided with all full facepiece masks.

540) Which of the following SCBA types are used the most in the fire service today?

A) Open circuit SCBA.
B) Closed circuit SCBA.
C) Rebreather apparatus.
D) Remote circuit SCBA.

Answer --> A


541) Firefighters using SCBA should always be cognizant of the limitations of the equipment. All of the following would be considered limitations of the equipment except –

A) Limited visibility.
B) Decreased ability to communicate.
C) Increased weight.
D) The emotional stability of the firefighter.

Answer --> D


Obviously, the emotional state of the firefighter has nothing to do with the limitations of the equipment. Another limitation of the equipment would include decreased mobility.
542) Structural personal protective clothing is designed to cover all portions of your skin when you are –

A) Crawling.
B) Bending.
C) Moving.
D) All the above.

Answer --> D


543) Which of the following would NOT be considered one of the four basic SCBA component assemblies?

A) Facepiece assembly.
B) Cascade assembly.
C) Backplate and harness assembly.
D) Regulator assembly.

Answer --> B

The fourth would be the Air Cylinder assembly.

544) Fully charged, a typical 30-minute bottle will contain __ cubic feet of breathing air at 4,500 psi.

A) 35
B) 45
C) 55
D) 65

Answer --> B

That is 1270 Liters.

545) SCBA regulators are found in which of the following locations?

A) On the facepiece.
B) On the firefighter's chest.
C) On a waist strap.
D) All the above.

Answer --> D

Most newer SCBA have regulators that are located on the facepiece.
546) During the normal operation of SCBAs the mainline valve is __, while the bypass valve is –

A) Fully open, closed.  
B) Partially open, closed.  
C) Partially opened, partially closed.  
D) Closed, fully opened.  

Answer -->  A


On some SCBA systems, the bypass valve controls a direct airline from the cylinder in the event that the regulator fails.

547) Before donning SCBAs, a firefighter should check both the cylinder gauge and the regulator gauge, to make sure the cylinder is full, and that the two readings are within –

A) 50 psi of each other.  
B) 100 psi of each other.  
C) 150 psi of each other.  
D) 200 psi of each other.  

Answer -->  B


548) Modern SCBA units have audible alarms that alert the firefighter when the pressure in the tank becomes less than approximately –

A) 1/2 full.  
B) 1/4 full.  
C) 1/3 full.  
D) 1/8 full.  

Answer -->  B


549) Which of the following is not a recommended method for preventing or controlling internal fogging of the facepiece?

A) Using the cool air from the cylinder to clear away internal condensation.  
B) Using one hand to quickly pull the facepiece away from the face, and with the other hand to wipe the condensation clean with the protective hood.  
C) Use a nosecup to deflect exhalations.  
D) Applying an antifogging agent to the inside of the facepiece.  

Answer -->  B


NOTE:  
In cold weather, condensation can be reduced if the firefighter dons the facepiece just before he/she leaves the warm engine. Donning the facepiece enroute to the call will fill the faceplate with warm humid moisture which can quickly condense when the firefighter leaves the apparatus and enters much colder air.
All Chapters

550) What is the purpose of a 'heads-up' (HUD) display?

A) Displays the current cylinder pressure on the inside of the facepiece lens, or mask-mounted regulator and allows the firefighter to monitor the cylinder’s air supply without having to read an external gauge.
B) Displays the ambient temperature of the room, so the firefighter can monitor excessive temperatures that may cause equipment failure.
C) Displays levels of Carbon monoxide, Oxygen and hydrocarbons in the atmosphere, so the firefighter can constantly monitor the area for toxic gases.
D) Generates a narrow field in the facepiece where the firefighter can literally see through the smoke, much like a miniature thermal imaging camera.

Answer -->  A


551) Which NFPA Standard states that all new SCBA must be equipped with a rapid intervention crew universal air connection (RIC UAC)?

A) NFPA 1990.
B) NFPA 1981.
C) NFPA 1980.
D) NFPA 1982.

Answer -->  B


552) Which NFPA standard requires that goggles or other appropriate primary eye protection be worn when participating in operations where protection from flying particles or chemical splashes is necessary?

A) NFPA 1900.
B) NFPA 1500.
C) NFPA 1971.
D) NFPA 1600.

Answer -->  B


553) Which statement regarding Closed–Circuit breathing apparatus is NOT true.

A) They are commonly used in modern day fire fighting.
B) They can sustain a firefighter from 30 minutes to 4 hours.
C) They weigh less than open circuit systems.
D) Their cylinders contain pure oxygen.

Answer -->  A


They are now used in shipboard operations, extended hazardous materials incidents, some rescue operations, and by industrial fire brigades.
554) A Personal Alert Safety System (PASS) is activated when –

A) The user remains motionless for a measured period of time.
B) When the air in the SCBA falls below 500 psi.
C) When there is a malfunction with the SCBA regulator.
D) If the user runs out of air in the cylinder.

Answer --> A


555) PASS devices should be checked at least –

(1) Weekly (2) Bi-Weekly (3) Monthly (4) Every 6 months (5) Before each use (6) Daily

A) 5, 6.
B) 6
C) 2
D) 3

Answer --> A


556) A PASS alarm will activate if a firefighter remains motionless for more than –

A) 10 seconds.
B) 30 seconds.
C) 60 seconds.
D) 90 Seconds.

Answer --> B


557) All the following are methods for donning SCBA except –

A) Donning From A Seat Method.
B) Over-The-Head Method.
C) Coat Method.
D) Over-The-Arm Method.

Answer --> D


Also included is donning from a rear mount or compartment mount.
558) According to NFPA 1404, Standard for a Fire Department Self-Contained Breathing Apparatus Program, an air cylinder should not be stored with no less than __ of its capacity.
A) 100%.
B) 95%.
C) 90%.
D) 85%.

Answer --> C


559) Firefighters, while inspecting SCBA equipment should check for which of the following?
A) Check to see if remote gauges and cylinder gauges are within 100 psi of each other.
B) Ensure that both harness and facepiece straps are fully extended.
C) Make sure all valves are in their proper position.
D) All the above should be checked.

Answer --> D


In addition:
Check the low-pressure alarm.
Check the PASS device to ensure that it is working.
Check all battery-powered functions.

560) A firefighter donning a SCBA by putting one arm at a time through the shoulder straps, best describes which of the following methods?
A) Over-the-head method.
B) Coat method.
C) Over-the-arm method.
D) Arm-lift-shoulder method.

Answer --> B


561) Most firefighter gloves are made from –
A) Leather.
B) Nomex.
C) Kevlar.
D) Nylon.

Answer --> A

562) Which statement regarding SCBAs is NOT true?

A) Never stand to don SCBA while the vehicle is moving. 
B) Seat belts must be worn by firefighters at all times, except while donning SCBA. 
C) Do not keep facepieces connected to their regulators during storage. 
D) The SCBA’s position should match the proper wearing position of the firefighter. 

Answer -->  B


Firefighters should not remove seat belts for donning SCBA.

563) Which of the following would be considered standard mounts for donning SCBA?

(1) Side mount  (2) Rear mount  (3) Inverted mount  (4) Compartment mount  (5) Backup mount

A) 1, 3. 
B) 2, 3. 
C) 3, 4, 5. 
D) 1, 2, 4, 5. 

Answer -->  D


564) The protective hood should be pulled up in place over the head –

A) Before the facepiece has been donned. 
B) After the facepiece has been donned. 
C) Before the helmet and the facepiece is donned. 
D) Protective hoods are not necessary if the helmet is equipped with side flaps. 

Answer -->  B


565) When donning an SCBA facepiece the –

A) Lower straps should be tightened first. 
B) The temple straps must be tightened first. 
C) The top strap must be tightened first. 
D) All straps must be tightened by pulling them outward from the sides. 

Answer -->  A


Facepiece straps should be tightened by pulling opposing straps evenly and simultaneously to the rear. Pulling straps outward to the sides may damage the facepiece. Some facepieces do not come with top straps.
566) All the following statements are true regarding donning SCBA facepieces except –

A) No hair should come between the firefighter's skin and the sealing surface of the facepiece.
B) Positive pressure should be checked by gently breaking the seal by inserting two fingers under the edge of the facepiece.
C) Facepieces should be cleaned with paper towels.
D) Do not submerge lower pressure hoses in water.

Answer --> C

Do not use paper towels for cleaning facepieces. Paper towels will scratch the lens.

567) The first step in doffing an SCBA is to –

A) Remove the facepiece.
B) Make sure you are out of the contaminated area, and be sure that SCBA is no longer required.
C) Disconnect low pressure hose from the regulator, or remove regulator from the facepiece.
D) Discontinue the flow of air from the regulator to the facepiece.

Answer --> B

It makes little sense to doff the SCBA if you are still in a contaminated area. Always be aware of your surroundings. It's called situational awareness.

568) Inspections are typically performed daily, weekly, or whenever firefighters report for duty. However, the period between inspections must not exceed –

A) 2 days.
B) 3 days.
C) 5 days.
D) 1 week.

Answer --> D

Qualified SCBA repair technicians must also inspect the units annually and after any repairs have been completed.

569) SCBA faceplates should be cleaned by which of the following methods?

A) Washed and sanitized to remove hydrocarbons and harmful substances.
B) Scrubbed with a soft abrasive pad and a strong disinfectant.
C) Washed with hot water and dried with a paper towel.
D) Soaked in a bath of 70% ethanol for a period of 30 minutes.

Answer --> A

CodeRQ
Keeping facepieces clean and sanitized helps prevent hydrocarbons from contaminating your skin.
570) Air cylinders must be stamped or labeled with the date of manufacture and the date of the cylinder's last hydrostatic test. Fully wrapped fiberglass cylinders should be tested?

A) Every year.
B) Every 2 years.
C) Every 3 years.
D) Every 5 years.

Answer --> C


These cylinders have a 15-year service life.

571) Air cylinders must be stamped or labeled with the date of manufacture and the date of the cylinder's last hydrostatic test. Steel and aluminum cylinders should be tested?

A) Every year.
B) Every 2 years.
C) Every 3 years.
D) Every 5 years.

Answer --> D


These cylinders have an indefinite service life until they fail their hydrostatic test.

572) SCBA air cylinders are filled from compressor purification systems, or cascade systems of at least –

A) One, 300 cubic-foot cylinder.
B) Two, 300 cubic-foot cylinders.
C) Three, 300 cubic-foot cylinders.
D) Four, 300 cubic-foot cylinders.

Answer --> C


573) There should be a fundamental rule in fire fighting, that no firefighter shall be permitted to enter any potentially toxic atmosphere, such as an interior or exterior fire attack, any below-grade rescue, or hazardous materials scene without –

A) Full turnout gear.
B) Self-contained breathing apparatus.
C) A fire department radio.
D) Another firefighter of equal or greater skill.

Answer --> B

574) Which of the following statements regarding emergency situations with SCBAs is NOT true?

A) Don't panic, and try to control your breathing while crawling.
B) Stop and think. How did you get to where you are now?
C) Once you come in contact with a wall, crawl in one direction.
D) Use the hoseline to help you get out. (Female coupling closest to the exit – Male coupling closest to the fire.

Answer -->  D

This little tidbit of information can save your life someday.

The male coupling always points you away from the fire and back to the outside. The female coupling points to the fire.

The female coupling is smooth, and has no lugs on the shank, while the male has rocker lugs on the shank.
Remember the swivel has lugs and is connected to the female coupling, so don't get confused. Take your time and feel for the swivel then locate the male coupling and start in that direction.

575) Which statement is NOT true regarding the use of SCBAs?

A) Use the bypass valve only for emergencies.
B) Be sure that the mainline valve is opened and locked.
C) If you have to use the bypass valve, be sure to keep it open between breaths.
D) Always work in groups of two or more when wearing SCBAs.

Answer -->  C

The bypass valve should be closed between breaths.

576) Fire shelters are constructed of which of the following materials?

A) Mylar composite.
B) Kevlar composite.
C) Aluminized fabric.
D) Magnetized fabric.

Answer -->  C

A fire shelter reflects the heat of the fire away from the firefighter while in use.
577) Which of the following statements regarding personal protective equipment is not true?

A) Wildland personal protective clothing is designed, certified, and intended for interior structure firefighting.
B) Emergency operations along roadways are extremely dangerous for firefighters and emergency responders.
C) Utility gloves are not intended for patient care, but to provide a barrier against bodily fluids, disinfectants, and cleaning solutions.
D) A single use item worn over footwear to provide a limited barrier against bodily fluids is called footwear covers.

Answer -->  A

NTQ

578) The first step in donning personal protective equipment is to –

A) Check the cylinder pressure. It should be at least 90% full.
B) Position the SCBA in front of you ready for donning.
C) Don gloves.
D) Don protective coat, trousers, and boots.

Answer -->  D


579) The last step in donning personal protective equipment is to –

A) Check the cylinder pressure. It should be at least 90% full.
B) Position the SCBA in front of you ready for donning.
C) Don helmet, with chin strap secured and adjusted, and finally gloves.
D) Don protective coat, trousers, and boots.

Answer -->  C


580) The first step in filling a SCBA cylinder either from a cascade system or a Compressor/Purifier is to –

A) Check the hydrostatic test date of the cylinder.
B) Inspect the cylinder for damage such as nicks, cuts, gouges, or discoloration from heat.
C) Place the cylinder in a fragment-proof fill station.
D) Make sure that the hose bleed valve is closed.

Answer -->  A

581) The first step in performing a two person air cylinder change is to –

A) Doff the unit.
B) Obtain a full air cylinder and have it ready.
C) Close the cylinder valve on the used bottle.
D) Disconnect the regulator from the face piece, or disconnect the low-pressure hose from the regulator.

Answer --> D


582) The last step in performing a two person air cylinder change is to –

A) Open the cylinder valve.
B) Check pressure reading on remote gauge and/or indicators and report reading.
C) Connect the high-pressure hose to the cylinder.
D) Check the condition of the O-ring.

Answer --> B


583) One way a firefighter can conserve air during an emergency situation is to use the technique "Skip breathing." To accomplish this, the firefighter –

A) Inhales and holds his breath for as long as it would take to exhale.
B) Inhales and holds his breath for as long as he can, before taking another breath.
C) Exhales and holds his breath for as long as he can, before taking another breath.
D) Exhales and holds his breath for 10 seconds.

Answer --> A

Notes) No longer listed in Essentials but still a good technique.

584) Which of the following is the Standard on Protective Ensembles for Technical Rescue Incidents?

A) NFPA 1951.
B) NFPA 1961.
C) NFPA 1601.
D) NFPA 1500.

Answer --> A


While structural personal protective clothing is sometimes worn for technical rescue operations, it is usually too bulky and heavy. Respiratory protection typically consists of air purifying respirators (APR), SCBAs, or supplied air respirators (SAR).
585) A full-body wet suit that is buoyant, thermally-insulated, and abrasion/puncture-resistant would be used for which of the following?

A) Standing/Swift water rescue.
B) Ice rescue.
C) Hazardous materials incidents.
D) Proximity firefighting on nautical vessels.

Answer --> A


A rescue helmet is also part of the required ensemble. In addition, a U.S. Coast Guard (USCG) approved personal floatation device (PFD) also must be worn in rivers, streams, and lakes, and along shorelines and coastlines.

586) Only personnel trained in the care and cleaning of protective clothing should perform this type of cleaning –

A) Routine cleaning.
B) Advanced cleaning.
C) Specialized cleaning.
D) Contract cleaning.

Answer --> B


587) Specialized cleaning performed by the manufacturer, its representative, or a certified vendor is called –

A) Routine cleaning.
B) Advanced cleaning.
C) Specialized cleaning.
D) Contract cleaning.

Answer --> D


588) The type of cleaning required when clothing is contaminated with hazardous materials or body fluids that cannot be removed by routine or advanced cleaning is called –

A) Target cleaning.
B) Hazardous cleaning.
C) Specialized cleaning.
D) Contract cleaning.

Answer --> C

589) A compressed substance with no specific volume, that will assume the shape of its container is commonly called a –

A) Gas.
B) Vapor.
C) Fume.
D) Volatile substance.

Answer --> A


590) Gaseous form of a substance that is normally in a solid or liquid state at room temperature and pressure; formed by evaporation from a liquid or sublimation from a solid is known as a –

A) Effluvium.
B) Vapor.
C) Fume.
D) Volatile substance.

Answer --> B


591) What is the lethal exposure time of hydrogen cyanide (HCN) in humans at a concentration of 20 to 40 ppm?

A) 5 minutes.
B) 10 minutes.
C) 19 minutes.
D) 30 minutes.

Answer --> D


It would be very unlikely that you will ever be asked this question, however 20 to 40 ppm could be very likely during a structure fire, and a good reason to wear SCBA during salvage and overhaul operations.

592) Disease causing airborne pathogens include which of the following?

(1) Viruses.  (2) Bacteria.  (3) Fungi.  (4) Algae.

A) 1, 2.
B) 2, 3.
C) 1, 2, 3.
D) 1, 2, 3, 4.

Answer --> C

All Chapters

593) Disease causing microorganisms that are suspended in the air are called –

A) Airborne pathogens.
B) Suspended pathogens.
C) Plumed pathogens.
D) Volitant pathogens.

Answer --> A


594) All of the following would be considered airborne pathogens except –

A) Pneumonia and influenza.
B) HIV and Hepatitis B.
C) Tuberculosis (TB) and SARS.
D) Measles, Chickenpox, and Smallpox.

Answer --> B


HIV and Hepatitis B would be considered bloodborne pathogens.

595) The type of respiratory filter that is certified to remove at least 99.97% of monodisperse particles of 0.3 micrometers in diameter is called –

A) HIPPA filters.
B) HAPA filters.
C) HEPA filters.
D) HOPA filters.

Answer --> C


HEPA stands for High-Efficiency Particulate Air filter.

596) The primary type of respiratory protection that you will use in the fire service is called –

A) ARS.
B) APR.
C) ADR.
D) ASR.

Answer --> D


ASR stands for atmosphere-supplying respirators. APR stands for air-purifying respirator.
All Chapters

597) The respirator fit test that measures the firefighter's response to a test agent, such as irritant smoke or odorous vapor is called the –

A) Quantitative Fit Test.  
B) Qualitative Fit Test.  
C) Static Fit Test.  
D) Dynamic Fit Test.

Answer -->  B


If the firefighter detects the test agent, such as through smell or taste, the respirator fit is inadequate.

598) The respirator fit test in which instruments measure the amount of a test agent that has leaked into the respirator from the ambient atmosphere is called the –

A) Quantitative Fit Test.  
B) Qualitative Fit Test.  
C) Static Fit Test.  
D) Dynamic Fit Test.

Answer -->  A


If the leakage measures above a pre-set amount, the respirator fit is inadequate.

599) Particulate filters are regulated by the Code of Federal Regulations, specifically Title 42: Public Health, Part 84: Approval of Respiratory Protective Devices. They are divided into nine classes, three levels of filtration (95, 99, and 99.97 percent), and three categories of filter degradation (N, R, and P) that indicate the filter’s limitations. What does the 'P' stand for?

A) Not resistant to oil.  
B) Resistant to oil.  
C) Used when oil or non–oil lubricants are present.  
D) Use only when oil is present.

Answer -->  C


600) Which of the following statements regarding donning SCBA facepieces is correct?

A) All straps should be fully extended.  
B) No hair should come between the skin and the facepiece sealing surface.  
C) The chin should be centered in the chin cup and the harness centered at the rear of the head.  
D) All the above.

Answer -->  D

601) The testing method that uses water under pressure to check the integrity of pressure vessels is called –

A) Hydrostatic test.
B) Hydrophobic test.
C) Hypodermic test.
D) Hydroscopic test.

Answer --> A


602) Many municipalities now require that all newly constructed buildings taller than ___ install Firefighter Breathing Air Replenishment Systems (FBARS).

A) 50 feet.
B) 75 feet.
C) 100 feet.
D) 125 feet.

Answer --> B


603) After entering an IDLH atmosphere, firefighters should keep their SCBA on and activated until –

A) Visibility improves.
B) The incident commander says its safe enough to remove them.
C) They leave the contaminated area.
D) All the above.

Answer --> C


604) The legal term for the maximum amount of a chemical substance or other hazard that an employee can be exposed to is known as the –

A) Permissible exposure limit.
B) Permissible exposure level.
C) IDLH threshold.
D) IDLH exposure limit.

Answer --> A


Abbreviated PEL.
605) What is the first step in the one-person method for changing an SCBA cylinder?

A) Fully close the cylinder valve.
B) Disconnect the high-pressure coupling from the cylinder.
C) Place the SCBA unit on a firm, clean surface.
D) Remove the empty cylinder from the harness assembly.

Answer --> C


606) Nonload-bearing rope that is anchored to a safe, exterior location and attached to a firefighter during search operations to act as a safety line.

A) Dynamic rope.
B) Static rope.
C) Rescue rope.
D) Search line.

Answer --> D


607) Portable fire extinguishers should be considered –

A) As a primary means of extinguishing incipient fires.
B) As a backup for hoselines.
C) As an effective means of extinguishing structure fires, when no other means are available.
D) As an effective means of preventing backdraft conditions.

Answer --> A


608) According to NFPA 1001, those qualified at the Fire Fighter I level must know all, but which of the following, in regard to portable fire extinguishers?

A) The chemical makeup of the compounds used within each type of extinguisher.
B) The classifications of types of fires, and the risks associated with each class of fire.
C) The operating methods of portable fire extinguishers.
D) The limitations of portable fire extinguishers.

Answer --> A

609) Those qualified at the Fire Fighter I level must be able to do all but which of the following?

A) Select the appropriate extinguisher for size and type of fire, and safely carry it.
B) Approach the fire with the portable fire extinguisher.
C) Operate the portable fire extinguisher.
D) Safely refill the fire extinguisher after it has been deployed.

Answer -->  D


Firefighters don't usually refill fire extinguishers.

610) Which NFPA standard is the Standard for Portable Fire Extinguishers?

A) NFPA 10.
B) NFPA 11.
C) NFPA 16.
D) NFPA 18.

Answer -->  A


611) Backpack pump tank water extinguishers usually have a maximum capacity of –

A) 2 gallons of water.
B) 3 gallons of water.
C) 4 gallons of water.
D) 5 gallons of water.

Answer -->  D


612) Every agent extinguishes fire by at least which one of the following?


A) 1, 3, 4, 6.
B) 1, 2, 4, 5.
C) 1, 2, 3, 5.
D) All the above.

Answer -->  C

613) What is the principle agent of a Wet Chemical fire extinguisher?

A) Sodium bicarbonate.
B) Potassium acetate.
C) Monoammonium phosphate.
D) Potassium chloride.

Answer --> B


614) The primary mode in which Water extinguishes a fire is through –

A) Oxygen depletion.
B) Cooling.
C) Chain inhibition.
D) Vapor suppression.

Answer --> B


615) What is meant by 'Saponification'?

A) The fire is extinguished by oxygen exclusion.
B) The fire is extinguished by reducing the burning material below its ignition temperature.
C) The fire is extinguished by interrupting the chemical chain reaction.
D) The fire is extinguished by forming an oxygen-excluding soapy foam surface.

Answer --> D


616) What is meant by 'smothering' a fire?

A) The fire is extinguished by oxygen exclusion.
B) The fire is extinguished by reducing the burning material below its ignition temperature.
C) The fire is extinguished by interrupting the chemical chain reaction.
D) The fire is extinguished by forming an oxygen-excluding soapy foam.

Answer --> A


Oxygen is excluded from the burning process.
617) What is meant by cooling a fire?
A) The fire is extinguished by oxygen exclusion.
B) The fire is extinguished by reducing the burning material below its ignition temperature.
C) The fire is extinguished by interrupting the chemical chain reaction.
D) The fire is extinguished by forming an oxygen-excluding soapy foam.

Answer --> B


618) The primary mode in which Foam extinguishes a fire is through –
A) Oxygen depletion.
B) Cooling.
C) Chain inhibition.
D) Vapor suppression.

Answer --> A


619) The primary mode in which Dry Chemical extinguishes a fire is through –
A) Oxygen depletion.
B) Cooling.
C) Chain inhibition.
D) Vapor suppression.

Answer --> C


620) The primary mode in which Wet Chemical extinguishes a fire is through –
A) Oxygen depletion.
B) Cooling.
C) Chain inhibition.
D) Vapor suppression.

Answer --> A

621) The primary mode in which Dry Powder extinguishes a fire is through –
A) Oxygen depletion.
B) Cooling.
C) Chain inhibition.
D) Vapor suppression.
Answer --> A


622) The primary mode in which Carbon Dioxide extinguishes a fire is through –
A) Oxygen depletion.
B) Cooling.
C) Chain inhibition.
D) Vapor suppression.
Answer --> A


623) The primary mode in which Clean Agent extinguishes a fire is through –
A) Oxygen depletion.
B) Cooling.
C) Chain inhibition.
D) Vapor suppression.
Answer --> C


624) The secondary mode in which Foam extinguishes a fire is through –
A) Oxygen depletion.
B) Cooling.
C) Chain inhibition.
D) Vapor suppression.
Answer --> D

625) The secondary mode in which Water extinguishes a fire is through –

A) Oxygen depletion.
B) Cooling.
C) Chain inhibition.
D) Vapor suppression.

Answer -->  A


626) The secondary mode in which Dry Chemical extinguishes a fire is through –

A) Oxygen depletion.
B) Cooling.
C) Chain inhibition.
D) Vapor suppression.

Answer -->  A


627) Fires that involve flammable and combustible liquids are classified as –

A) Class A.
B) Class B.
C) Class C.
D) Class D.

Answer -->  B


628) Fires that involve ordinary combustibles such as textiles, paper, plastic, rubber and wood are classified as –

A) Class A.
B) Class B.
C) Class C.
D) Class D.

Answer -->  A

629) Fires that involve combustible cooking oils are classified as –

A) Class O.
B) Class G.
C) Class K.
D) Class D.

Answer --> C


630) Fires that involve combustible metals are classified as –

A) Class O.
B) Class G.
C) Class M.
D) Class D.

Answer --> D


631) __ fires are Class A or Class B fires created by electrical energy.

A) Class C.
B) Class E.
C) Class EE.
D) Class CE.

Answer --> A


632) The first step in extinguishing a Class C fire is to –

A) Test fire the extinguisher before you approach the fire to make sure it is operational.
B) Use a dry chemical extinguisher.
C) Use a halon extinguisher.
D) Disconnect the power to whatever is burning.

Answer --> D

633) Pump-Type water extinguishers are applicable to which class of fire?

A) Class A.
B) Class B.
C) Class C.
D) Class D.

Answer --> A


634) Under normal conditions Stored-Pressure water extinguishers can obtain a fire stream of –

A) 10 – 20 feet.
B) 20 – 30 feet.
C) 30 – 40 feet.
D) 40- 50 feet.

Answer --> C


635) Wet Chemical fire extinguishers should only be use on which of the following classes of fire?

A) Class C.
B) Class B.
C) Class K.
D) Class D.

Answer --> C


636) Carbon dioxide fire extinguishers can be used on which of the following classes of fire?

(1) Class A  (2) Class B  (3) Class C  (4) Class D  (5) Class K

A) 1, 2.
B) 2, 3.
C) 2, 4.
D) 1, 2, 3, 4.

Answer --> B

637) Stored-pressure water extinguishers are normally compressed with which of the following gases?

(1) Air  (2) Hydrogen  (3) Nitrogen  (4) Helium  (5) Argon

A) 1, 3.  
B) 1, 2, 4.  
C) 1, 3, 4.  
D) 1, 4, 5.

Answer -->  A  


638) What is the main purpose of adding Class A foam to water extinguishers?

A) The foam helps extinguish the fire through vapor suppression.  
B) The foam helps extinguish the fire through oxygen depletion.  
C) The foam serves as a wetting agent for extinguishing deep-seated fires.  
D) All the above.

Answer -->  C  


Foam enhances its effectiveness by reducing the surface tension to help the water penetrate deeper into the material that is on fire, such as upholstered furniture, vehicle seats, and wildland fires.

639) Dry Powder extinguishers are used to extinguish which types of fires?

A) Combustible metal fires.  
B) Energized electrical fires.  
C) Super-heated grease fires.  
D) Uncontrollable hydrocarbon fires.

Answer -->  A  


640) Which of the following types of water extinguishers are safe to use on energized electrical equipment?

A) Pump type water extinguishers.  
B) Water–Mist Stored–Pressure extinguishers with deionized water.  
C) Indian–tank style extinguishers.  
D) No water extinguisher is safe to use on electrical fires.

Answer -->  B  


Answer B may be true with IFSTA, but I would never trust that the water in the extinguisher is deionized. Impurities in water makes it electrically conductive.
641) You are responding to MCDONALDs where the deep frier oil cooking the french fries as burst into flames. Which of the following extinguishers would you use to extinguish this fire?

A) Wet Chemical Stored-Pressure extinguisher.
B) Dry Chemical extinguisher.
C) Carbon Dioxide extinguisher.
D) Water-Mist Stored-Pressure extinguisher.

Answer --> A


The oil burning in the deep frier makes this fire a Class K fire. Wet Chemical Stored-Pressure extinguishers are used to extinguish this type of fire.

642) Which of the following extinguishers is particularly useful in combating fires in or suppressing vapors from small liquid fuel spills?

A) Clean Agent extinguishers.
B) Dry Chemical extinguishers.
C) Carbon Dioxide extinguishers.
D) Aqueous Film Forming Foam (AFFF) extinguishers.

Answer --> D


643) Firefighter Jon says that when applying AFFF on to a liquid spill you should allow it to rain down on to the spill. Firefighter Dave says that when applying AFFF on to a liquid spill you should deflect it off an object. Who is correct?

A) Jon.
B) Dave.
C) Both are correct.
D) Neither are correct.

Answer --> C


644) When AFFF and water are mixed together, the resulting foam mixture –

A) Has the specific gravity of 1.
B) Has the specific gravity greater than 1.
C) Is lighter than water.
D) Is heavier than water,

Answer --> C

645) Water from which ionic salts, minerals, and impurities have been removed by ion-exchange is called –

A) Distilled water.
B) Polarized water.
C) Deionized water.
D) Ionized water.

Answer -->  C


646) AFFF extinguishers are not effective on which of the following classes of fire?

(1) Class A  (2) Class B  (3) Class C  (4) Class D  (5) Class K.

A) 1, 3, 4.
B) 3, 4, 5.
C) 1, 2, 5.
D) 2, 3, 5.

Answer -->  B


647) Which of the following extinguishers were designed specifically as replacements for Halon 1211?

A) Clean Agent extinguishers.
B) Dry Chemical extinguishers.
C) Carbon Dioxide extinguishers.
D) Water-Misted Stored-Pressure extinguishers.

Answer -->  A


648) Carbon Dioxide extinguishers are effective in extinguishing which of the following classes of fire?

A) Class A only.
B) Class A and B only.
C) Class B and C only.
D) Class D only.

Answer -->  C

649) CO2 fire extinguishers should be protected from freezing if they are exposed to temperatures below –

A) 45 degrees F.
B) 40 degrees F.
C) 32 degrees F.
D) CO2 extinguishers do not require special freeze protection.

Answer --> D


650) The reach of a Carbon Dioxide extinguisher is –

A) 4 to 6 feet.
B) 3 to 8 feet.
C) 10 to 15 feet.
D) 15 to 20 feet.

Answer --> B


651) One hazard in using CO2 extinguishers is –

A) Contact with the discharge horn may cause electrical shock.
B) Contact with the discharge gas may cause carbon dioxide poisoning.
C) Contact with a Class C fire may cause electric shock.
D) None of the above.

Answer --> A


652) Which portable extinguisher is the most common portable fire extinguisher in use today?

A) CO2 extinguishers.
B) Dry chemical extinguishers.
C) Dry powder extinguishers.
D) Stored-Pressure Water Extinguishers.

Answer --> B

653) Multipurpose dried chemical extinguishers are rated for which class of fire?

A) Class A only.
B) Class B only.
C) Class C only.
D) Class A, B or C.

Answer --> D


654) Which type of portable fire extinguisher has the characteristic 'horn' nozzle?

A) Dry chemical extinguishers.
B) CO2 extinguishers.
C) Halon extinguishers.
D) Portable backpack pump tank water extinguishers.

Answer --> B


655) What is the effective reach of a Halon 1301 extinguisher?

A) 4 to 6 feet
B) 6 to 10 feet
C) 10 to 15 feet
D) 15 to 20 feet

Answer --> A


656) Class K fire extinguishers are tested to ensure an effectiveness against ____ square feet of light cooking oil in a deep fat fryer.

A) 2.25.
B) 5
C) 7.5.
D) 9.5.

Answer --> A

657) The stream reach of a dry chemical extinguisher under normal conditions is –

A) 4 to 6 feet.
B) 6 – 12 feet.
C) 5 – 10 feet.
D) 5 to 20 feet.

Answer --> D


658) Normal discharge time for a hand-carried dry chemical extinguisher is –

A) 5 to 10 seconds.
B) 10 – 15 seconds.
C) 8 – 25 seconds.
D) 25 – 60 seconds.

Answer --> C


659) Halon 1211 extinguishers are primarily designed for which of the following class of fire?

A) Class A only.
B) Class B only.
C) Class C only.
D) Both Class B and C.

Answer --> D


660) Which compound would you NOT expect to find in dry chemical extinguishers?

A) Potassium bicarbonate.
B) Urea–potassium bicarbonate.
C) Potassium chlorate.
D) Monoammonium phosphate.

Answer --> C


Potassium chlorate makes a better explosive than it does an extinguishing agent. Potassium chloride would be the compound for extinguishing fires.
661) Care against freezing should be given to dry chemical extinguishers if they are exposed to temperatures below –

A) 45 degrees F.
B) 40 degrees F.
C) 32 degrees F.
D) Because the material is dry chemical, no special care is needed.

Answer -->  D


During manufacture, dry chemical agents are mixed with small amounts of additives that make the agent moisture-resistant and prevent them from caking or hardening.

662) When using a dry chemical extinguisher, the best results are obtained by attacking the –

A) Base of the fire.
B) Far edge of the fire and progressing back
C) Top-most part of the flames and progressing downward
D) Lower part of the flames and progressing upward

Answer -->  A


On Class A fires, the discharge should be directed at whatever is burning in order to cover it with the chemical.

663) A Class D fire extinguisher is used to extinguish which type of fire?

A) Paper and wood fires.
B) Liquid fires.
C) Electrical fires.
D) Metal fires.

Answer -->  D


664) What is the average discharge time of the carbon dioxide fire extinguisher?

A) 6 to 14 seconds.
B) 8 to 30 seconds.
C) 10 to 45 seconds.
D) 30 seconds to one minute.

Answer -->  B

665) Which of the following is NOT part of every fire extinguisher inspection?

A) Check that the extinguisher is in its proper location and that it is accessible.
B) Discharge a small amount of the extinguisher's contents to ensure that the unit is working properly.
C) Check all lock pins and tamper seals.
D) Check inspection tags for the date of the previous inspection.

Answer --> B


666) When inspecting fire extinguishers, if an extinguisher is found to be deficient in weight by __ it should be removed from service and replaced.

A) 5%.
B) 10%.
C) 12%.
D) 15%.

Answer --> B


667) Underwriter's laboratories has assigned a numerical rating system for Class A water fire extinguishers based on the extinguisher's –

A) Effectiveness.
B) Potential effectiveness.
C) Amount of extinguishing agent and the duration and range of the discharge.
D) Shape.

Answer --> C


668) Class A fire extinguishers have a UL numerical rating from 1 to –

A) 10
B) 20
C) 30
D) 40

Answer --> D

669) What is the UL numerical rating for Class B fire extinguishers based on?

A) The approximate square foot area of a flammable liquid fire that a nonexpert operator can extinguish.
B) The approximate square foot area of a flammable liquid that an expert operator can extinguish.
C) The size of the fire extinguisher.
D) The flow rate of the extinguishing agent.

Answer --> A


670) UL numerical ratings for Class B fire extinguishers run from 1-B to –

A) 40-B.
B) 60-B.
C) 640-B.
D) Class B fire extinguishers have no such ratings.

Answer --> C


671) What is the UL numerical rating range for Class C fire extinguishers?

A) 1–40.
B) 1 – 60.
C) 1 – 640.
D) Class C fire extinguishers have no such ratings.

Answer --> D


This is because electricity does not burn.

672) Besides being assigned letters and an UL numerical ratings, portable extinguishers are labeled with colored symbols so the extinguisher type is easily recognized. Which of the following is not correct?

A) Class A – Green triangle.
B) Class B – Gray square.
C) Class C – Blue circle.
D) Class D – Yellow star.

Answer --> B


The Class B symbol is a red square.
673) Some extinguishers are suitable for more than one class of fire. These extinguishers are marked in which of the following manners?

A) A green square with the word "All" surrounded by a blue circle.
B) A red circle with the word "All" surrounded by a red circle.
C) The extinguishers are identified by multiples of the symbols A, B, and or C.
D) Portable extinguishers can only be identified with one symbol.

Answer -->  C


674) Selecting the proper portable fire extinguisher depends on which of the following factors?

A) Hazards to be protected and the severity of the fire.
B) Personnel available as well as atmospheric conditions.
C) Ease of handling the extinguisher as well as consideration of any life hazard or operational concerns.
D) All the above.

Answer -->  D


Also included would be:
1) Classification of the burning fuel.
2) Rating of the fire extinguisher.
3) Size and intensity of the fire.
4) Availability of trained personnel.

675) Multipurpose dry-chemical fire extinguishers are rated for which class a fire?

A) Class A.
B) Class B.
C) Class C.
D) All the above.

Answer -->  D


676) The most effective way to extinguish a fire with a portable extinguisher is to direct the extinguishing agent –

A) Back and forth at the base of the flames.
B) Back and forth at the top of the flames.
C) Up and down starting from the right hand side of the flames.
D) Up and down starting from the left hand side of the flames.

Answer -->  A

677) A quick way to remember the steps in the operation of portable fire extinguishers is the –

A) PREP method.
B) PASS method.
C) PRIME method.
D) PIPE method.

Answer --> B


The PASS method is –

P- Pull the pin.
A- Aim the nozzle.
S- Squeeze the handle.
S- Sweep the nozzle back and forth.

678) When using a portable extinguisher on a fire, the firefighter should always __ before approaching the fire.

A) Be dressed in full protective gear.
B) Discharge a short test burst to ensure proper operation.
C) Have at least a 1 1/2 inch backup line drawn from an engine.
D) All the above.

Answer --> B

Notes) The reference has been dropped from this edition of Essentials. Knightlite has kept the question in because we believe that you should make sure the extinguisher is actually working before you face the fire. A quick test discharge will ensure that.

679) Backpack extinguishers are recommended in all of the following circumstances except –

A) To extinguish small grass fires.
B) To extinguish brush fires where fire apparatus can not reach.
C) As a useful tool at structure fires for overhauling smoking debris.
D) As an effective aid to extinguishing Class K fires.

Answer --> D


Obviously, it would not be wise to extinguish burning cooking oil with a water-based extinguisher.
680) NFPA 10 requires that Stored-Pressure water extinguishers should be protected against freezing if they are going to be exposed to temperatures less than –

A) 45 degrees F.
B) 40 degrees F.
C) 32 degrees F.
D) 0 degrees C.

Answer -->  B


681) Which of the following statements regarding Dry Powder extinguishers is true?

A) The terms “Dry Powder” and “Dry Chemical” can be used interchangeably.
B) Dry Powder extinguishers are for Class D fires only.
C) Dry powder extinguishers can be used for Class A, B, and C fires.
D) Dry powder extinguishers are used for Class B and C fires only.

Answer -->  B


682) A substance use for the purpose of controlling or extinguishing fire is called a –

A) Oxidizing agent.
B) Fire suppression agent.
C) Wetting agent.
D) Extinguishing agent.

Answer -->  D


683) Class A foam concentrate is sometimes added to a water extinguisher to increase effectiveness of extinguishing deep-seated fires, vehicle fires, and wildland fires. What is the main effect of the Class A foam.

A) The foam serves as a wetting agent.
B) The foam helps keep explosive vapors from being released into the air.
C) The foam prevents the water from freezing when the ambient temperature falls below 32 degrees F.
D) All the above.

Answer -->  A

684) Which of the following extinguishers are capable of creating a blanket of foam?

A) Dry chemical extinguishers.
B) Class B extinguishers.
C) AFFF extinguishers.
D) Any stored pressure water extinguisher.

Answer --> C


685) Which of the following are considered the two most common types of Halon?

(1) Halon 1601  (2) Halon 1211  (3) Halon 1019  (4) Halon 1301

A) 1, 2.
B) 2, 3.
C) 2, 4.
D) 3, 4.

Answer --> C


686) One of the main fears in using a CO2 extinguisher on flammable liquids is that the –

A) CO2 does not form any vapor-suppressing film, so reignition can pose a danger.
B) CO2 will freeze the liquid causing the possibility that the liquid will be more unstable in the solid state.
C) Pressure exerted on the liquid by the expelling gas will spread the fire.
D) All the above pose an equal danger.

Answer --> A


687) Which of the following statements regarding handheld fire extinguishers is NOT true?

A) The designs for handheld dry extinguishers are either "stored-pressure" or "cartridge-operated."
B) Stored pressure extinguishers have a constant pressure of about 200 psi.
C) Handheld extinguishers use helium as the pressurizing gas.
D) In cartridge-operated extinguishers, the agent tank is not pressurized while in storage.

Answer --> C


The gases used for these extinguishers are either, nitrogen or carbon dioxide.
688) Which of the following statements regarding the use of Class D extinguishing agents is true?

A) The agent should be applied in sufficient depth so that it completely covers the area that is burning.
B) If the combustible metal forms a crust, the crust must be broken to allow the extinguishing agent to reach the fire.
C) Once the Class D extinguishing agent has been applied, the fire should be scattered to ensure that the fire has been extinguished.
D) Once the agent has been applied to the combustible metal the entire area should be cooled down with water using a gentle fog.

Answer --> A


689) Test fires for rating Class D fires vary with the type of combustible metal being tested. Which of the following is NOT considered during each test?

A) Reactions between the metal and the agent, as well as the toxicity of the agent.
B) Toxicity of the fumes produced and the products of combustion.
C) Time to allow metal to burn out without fire suppression efforts versus the time to extinguish.
D) The half-life of the agent as well as the half-life of the residual combustible metal.

Answer --> D


690) A common-sized extinguisher, such as a multipurpose extinguisher rated 4–A, 20 B:C should be able to extinguish a Class A fire which is __ times larger than a 1–A fire, and also be able to extinguish approximately __ times as much Class B fire as a 1–B extinguisher.

A) 2, 10.
B) 4, 20.
C) 6, 30.
D) 8, 40.

Answer --> B


691) The labeling system recommended by NFPA 10 is the use of –

A) Pictographs representing Class A, Class B, and Class C fires to make the selection of the appropriate extinguisher.
B) Alphabetical/geometric symbols for the four classes of fire.
C) Color coordinated extinguisher canisters.
D) All the above.

Answer --> A

692) Firefighters using portable extinguishers should approach the fire from the –

A) Leeward side of the fire.
B) Windward side of the fire.
C) Uphill side of the fire.
D) Downhill side of the fire.

Answer -->  B


In other words, the wind should be at your back.

693) Portable extinguishers that have been used should –

A) Be laid on their sides to signal that the extinguisher is empty.
B) Be immediately refilled on-scene.
C) Be disposed of properly.
D) Have their nozzles removed to signal that the extinguisher is empty.

Answer -->  A


694) All portable fire extinguishers expel their contents by one of the following methods except –

A) Manual pump.
B) Electrostatic charge.
C) Stored pressure.
D) Pressure cartridge.

Answer -->  B


695) Dry chemical agents are –

A) Toxic when heated.
B) Toxic at any temperature.
C) Nontoxic.
D) Toxic in high concentrations.

Answer -->  C


Although the chemicals themselves are nontoxic, they can create respiratory problems as with any airborne particulate.
696) Wheeled dry chemical extinguishers are rated for all but which class of fire?

A) Class A.
B) Class B.
C) Class C.
D) Class D.

Answer --> D


697) All of the following are factors that determine the value of a fire extinguisher except –

A) Its UL rating.
B) Its serviceability.
C) Its accessibility.
D) Its simplicity of operation.

Answer --> A


698) Any fire extinguisher that shows any sign of damage or corrosion should be –

A) Taken out of service.
B) Disposed of.
C) Hydrostatically tested.
D) Allowed to remain in service until its next inspection date.

Answer --> A


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Answer change from old version. The old answer was C – hydrostatically tested.

699) In a dry chemical fire extinguisher, how often should the fire extinguishing agent be emptied and refilled with new material?

A) 2 years.
B) 3 years.
C) 5 years.
D) 6 years.

Answer --> D

700) One of the oldest tools used by firefighters is a(an) –

A) Halligan bar.
B) Rope.
C) Ax.
D) Bucket

Answer -->> B


701) NFPA 1001, Standard for Fire Fighter Professional Qualifications, requires that those trained to the Fire Fighter I level know how to perform all but which of the following?

A) Hoist tools and equipment with rope using the proper knot.
B) Know how to select the proper rope for a specific task.
C) Know how to properly maintain various types of ropes used in the fire service.
D) Be able to throw a rope bag at least 55 feet.

Answer -->> D


702) Rope used for any purpose other than rescue is commonly called __ rope.

A) Fire.
B) Safety.
C) Common.
D) Utility.

Answer -->> D


703) Which of the following situations would not be a typical use for a utility rope?

A) Hoisting up a pike pole to a second story window.
B) Securing an overturned car to a tree.
C) Lowering an injured patient in a stokes basket from a steep cliff.
D) Cordonning off an accident scene.

Answer -->> C


Lowering a patient would be a job for a Life Safety Rope.
704) Generally, how many twisted strands are used to construct a laid rope?

A) 1.
B) 2.
C) 3.
D) 4.

Answer -->  C


705) Which of the following types of rope is designed to stretch without breaking?

A) Dynamic rope.
B) Static rope.
C) Rescue rope.
D) Utility rope.

Answer -->  A


706) Which of the following types of rope is used for most common rope-rescue incidents?

A) Dynamic rope.
B) Static rope.
C) Escape rope.
D) Utility rope.

Answer -->  B


707) Which of the following types of rope is designed for low stretch without breaking?

A) Dynamic rope.
B) Static rope.
C) Rescue rope.
D) Utility rope.

Answer -->  B

708) According to NFPA 1983, low-stretch rope must not elongate more than __ when tested under a load equal to __ of its breaking strength.

A) 5%, 10.
B) 10%, 5%.
C) 10%, 10%.
D) 5%, 5%.

Answer --> C


709) The method of manufacturing rope without any knots or splices; a continuous strand of fiber that runs the entire length of a rope's core is known as –

A) Continuous strand construction.
B) Continuous mantle construction.
C) Synthetic braid core construction.
D) Block creel construction

Answer --> D


710) A dynamic and sudden load placed on a rope, typically during a fall is known as –

A) Impact load.
B) Dynamic load.
C) Static load.
D) Accelerated load.

Answer --> A


711) NFPA 1983 requires manufacturers to provide which of the following information regarding proper use of a rope?

A) Inspection procedures.
B) Criteria for retiring life safety rope from service.
C) Maintenance procedures
D) All the above.

Answer --> D

712) Which of the following statements regarding natural fiber ropes is not true?

A) It is resistant to sunlight.
B) It does not melt when exposed to heat.
C) It holds a knot firmly.
D) It is resistant to water damage.

Answer --> D


Natural fiber rope should not be allowed to become wet if it all possible because they are prone to mildew and mold.

713) All of the following statements are true in regard to synthetic fiber rope except –

A) It does not melt when exposed to heat.
B) It has a longer lifespan than natural fiber ropes.
C) It is very strong yet lightweight.
D) It is easy to maintain.

Answer --> A


The disadvantage of synthetic fibers is that they do melt when exposed to heat.

714) Which of the following types of rope is 19/64-inch in diameter and is intended to be used only once then destroyed?

A) Light-use rope.
B) General-use rope.
C) Throwline.
D) Escape rope.

Answer --> D


715) Which type of rope would be the best choice for use in a rescue situation?

A) Manila.
B) Sisal.
C) Cotton.
D) Synthetic.

Answer --> D

716) Ropes that are constructed by twisting together yarns to form strands are known as –

A) Laid rope.
B) Braided rope.
C) Braid–On–Braid rope.
D) Kernmantle rope.

Answer -->  A


717) Ropes composed of a braided covering or sheath over the main load bearing strands are known as –

A) Laid rope.
B) Braided rope.
C) Braid–On–Braid rope.
D) Kernmantle rope.

Answer -->  D


718) Ropes that have both a braided sheath and a braided core are known as –

A) Laid rope.
B) Braided rope.
C) Braid–On–Braid rope.
D) Kernmantle rope.

Answer -->  C


719) Rope that is made by uniformly intertwining strands of rope together is known as –

A) Laid rope.
B) Braided rope.
C) Braid–On–Braid rope.
D) Kernmantle rope.

Answer -->  B

720) What percentage of strength is found in the sheath of a braid–on–braid rope?

A) 25%.
B) 50%.
C) 75%.
D) 100%.

Answer --> B


The other 50% of its strength is in the core of the rope.

721) Which of the following methods is NOT a recommended method for cleaning synthetic fiber ropes?

A) Washing the rope by hand.
B) Using a special rope washer.
C) Brushing the rope with a brush or broom.
D) Washing in a front–loading clothes washer.

Answer --> C


722) Which of the following is NOT a recommended method for drying a synthetic fiber rope?

A) Loosely coiled and dried in a hose dryer.
B) Stretch out the rope on a clean dry surface and allow it to dry in direct sunlight.
C) Strung and dried out of direct sunlight on a hose tower.
D) All the above.

Answer --> B


This rope should be dried out of direct sunlight.

723) Which rope should not be stored wet?

A) Manila.
B) Nylon.
C) Kevlar Aramid.
D) Polypropylene.

Answer --> A


It has the disadvantage of being prone to mildew and mold.
All Chapters

724) Fire service rope that has a high degree of stretch without breaking under a load is known as –

A) Static rope.  
B) Dynamic rope.  
C) Bungie rope.  
D) Climbers rope.  

Answer -->  B  


725) Which of the following methods is the best way to clean a natural fiber rope?

A) Cool water, and a mild soap.  
B) Warm water, and a mild soap.  
C) A diluted bleach solution in warm water.  
D) Natural fiber ropes should not be exposed to water. Wipe or gently brush the rope to remove as much dirt as possible.  

Answer -->  D  


726) Which washing machine is the best choice for washing synthetic fiber ropes?

A) Front-load or top-load washing machines without center agitators..  
B) Front-loading washing machines with plastic windows.  
C) Top-loading washing machines.  
D) Synthetic ropes should never be washed by any machine.  

Answer -->  A  

CodeRQ

The rope should be placed in a mesh bag to protect the exterior from abrasion, then set the washer on the coolest wash and rinse temperature available and then use only a small amount of detergent.

727) The best method for storing kernmantle rope and other life-safety ropes is –

A) To hang the rope from a hose tower out of direct sunlight.  
B) Piled on top of one another in apparatus storage compartments.  
C) To place it in a rope bag.  
D) All the above.  

Answer -->  C  

728) Unused rope should be inspected –

A) Weekly.
B) Monthly.
C) Annually.
D) Before each use.

Answer -->  C


729) Life-safety rope that fails to pass inspection should be destroyed. In the fire service, what is meant by destroying a rope?

A) Disposing of the rope completely.
B) Removing the manufacturer's label.
C) Marking the rope as utility rope.
D) All the above.

Answer -->  D


730) When inspecting a kern mantle rope, firefighters look for lumps, depressions, or soft spots. What is the best course of action if any of these conditions are observed?

A) The rope should be tested under load.
B) The rope should be inspected by a NFPA trained examiner.
C) An attempt should be made to fix the found defect.
D) The rope should be downgraded to utility rope.

Answer -->  D


731) Most fire service rated webbing is made from –

A) Cotton.
B) Polyethylene.
C) Manila.
D) The same materials as synthetic rope.

Answer -->  D

732) What size wedding is the most common in the fire service?

A) 1-inch.
B) 2-inches.
C) 2 1/4-inches.
D) 2 1/2-inches.

Answer --> A


733) Which would not be considered part of the two main types of webbing construction?

A) Braided tubular weave.
B) Solid, flat design.
C) Spiral tubular weave.
D) Edge-stitched tubular weave.

Answer --> A


734) Which of the following is NOT one of the bends in a rope, in the formation of a knot?

A) The Twist.
B) The Bight.
C) The Loop.
D) The Round Turn.

Answer --> A


735) The end of the rope used to form the knot is commonly called all of the following except the –

A) Loose end.
B) Working end.
C) Running end.
D) Bitter end.

Answer --> C

736) The part of a knot between the two ends is called the –

A) Standing part.
B) Working part.
C) Flexing part.
D) Base part.

Answer -->  A


737) The __ is a good knot for forming a loop that will not constrict the object it is placed around, when using natural fiber ropes.

A) Bowline knot.
B) Clove hitch.
C) Half hitch.
D) Sheet bend.

Answer -->  A


738) Which is the knot of choice for attaching a rope to an object such as a pole, post, or hoseline?

A) Bowline knot.
B) Clove hitch.
C) Half hitch.
D) Sheet bend.

Answer -->  B


739) Which knot is particularly useful for joining two ropes of different diameter?

A) Bowline knot.
B) Clove hitch.
C) Half hitch.
D) Becket bend.

Answer -->  D


CodeRQ

Changed answer from the sheet bend to the becket bend. Also known as the sheet bend.
740) As a measure of safety, a firefighter should tie off any type of knot using –

A) A square knot.
B) A granny.
C) An overhand safety knot.
D) A figure-eight knot.

Answer --> C


741) From the list of knots below, which knot would you choose to hoist a roof ladder from the ground to the roof?

A) Becket bend.
B) Bowline.
C) Clove hitch.
D) Half hitch.

Answer --> B


You could also use a figure-eight knot as well.

742) Which method would you use to hoist an axe using a rope to a second story window?

A) Clove hitch on the head and a half hitch on the handle.
B) Half hitch on the head and a clove hitch on the handle.
C) A bowline on the head and a half hitch on the handle.
D) A figure-eight knot on the head and a bowline on the handle.

Answer --> A


743) Which knot is used to tie ropes of equal diameters together, or to tie a rope around an object when an end of the rope is not available?

A) Figure-eight follow through.
B) Sheet bend.
C) Clove hitch.
D) Figure-eight on a bight.

Answer --> A

744) Which is the best knot to use to hoist SCBA bottles, fire extinguishers, and other pressurized cylinders?

A) Figure-eight.
B) Sheet bend.
C) Clove hitch.
D) None of the above.

Answer -->  D

Hoisting pressurized cylinders with ropes is not recommended and is unsafe.

745) Which of the following procedures is the correct way to hoist a pike pole?

A) Raise the pike pole head down, with a figure-eight knot around the handle, followed by a half hitch in the center, and another half hitch around the head.
B) Raise the pike pole head up, with a clove hitch tied toward the end of the handle, followed by a half hitch in the center of the handle, and another half hitch around the head.
C) Raise the pike pole horizontally with two clove hitches; one tie to the end of the handle and the second tied around the head.
D) Raise the pike pole head up, with a bowline around the head, followed by a figure-eight around the center of the handle, and a sheet bend tied near the end of the handle.

Answer -->  B


746) Which of the following knots is ideal for hoisting portable ventilation fans?

(1) Bowline  (2) Figure-eight on a bight  (3) Clove hitch   (4) Becket Bend  (5) Half hitch

A) 1  
B) 1, 2.  
C) 3, 4.  
D) Any of the above.

Answer -->  B


747) The overhand safety-knot is often called the –

A) Safety.  
B) Finish.  
C) Finished end.  
D) All the above.

Answer -->  A

748) Which knot essentially consists of two half-hitches?

A) Bowline.
B) Sheet Bend.
C) Clove Hitch.
D) Figure 8.

Answer --> C


749) Which knot is also known as the Flemish Bend, and is used to tie ropes of equal diameters together?

A) Figure eight.
B) Figure-eight bend.
C) Figure-eight on a bight.
D) Figure-eight follow-through.

Answer --> B


750) __ is a good way to tie a closed loop in the end of a rope.

A) Figure eight.
B) Figure-eight bend.
C) Figure-eight on a bight.
D) Figure-eight follow-through.

Answer --> C


751) Which knot is the preferred knot for joining two pieces of webbing or the end of the same piece when a loop is needed.

A) Figure-eight on a bight.
B) Sheet bend.
C) Figure-eight follow-through.
D) Water knot.

Answer --> D

752) A metal snap link used to connect elements of a rescue system together is called a –

A) Brake bar rack.
B) Plate.
C) Carabiner.
D) Ascender.

Answer --> C


753) Uncharged hoselines should be hoisted –

A) With the nozzle facing down utilizing a clove hitch around the nozzle, and a half hitch around the doubled hose.
B) With the nozzle facing up utilizing a clove hitch around the nozzle and half hitch around the doubled hose.
C) With the nozzle facing down utilizing a half hitch around the nozzle and a clove hitch around the doubled hose.
D) With the nozzle facing up utilizing a half hitch around the nozzle and a clove hitch around the doubled hose.

Answer --> A


754) Which of the following knots is ideal for hoisting a power saw?

(1) Bowline  (2) Figure-eight on a bight  (3) Clove hitch   (4) Becket Bend  (5) Half hitch

A) 1  
B) 1, 2.  
C) 3, 4.  
D) 4, 5.

Answer --> B


Shameless plug... For more about fire fighter knots, purchase Knightlite's Fire Fighter 1 Knots DVD. It will help you learn the 8 basic fire fighter 1 knots. Visit Knightlite.com for more information.

755) All of the following rescue harnesses are recognized by NFPA 1983 except for –

A) Class I Harness.
B) Class II Harness.
C) Class III Harness.
D) Ladder belt.

Answer --> D


The ladder belt can only be used as positioning devices on ladders and for emergency escape.
756) Which of the following rescue harnesses is also known as a 'seat harness'?  
A) Class I Harness.  
B) Class II Harness.  
C) Class III Harness.  
D) Ladder belt.  
Answer --> A  

757) Which of the following rescue harnesses is also known as a 'full body harness'?  
A) Class I Harness.  
B) Class II Harness.  
C) Class III Harness.  
D) Ladder belt.  
Answer --> C  

758) Which of the following harnesses is rated to support a 600-pound load?  
A) Class I Harness.  
B) Class II Harness.  
C) Class III Harness.  
D) B and C  
Answer --> D  

759) Which of the following harnesses is rated to support a 300-pound load?  
A) Class I Harness.  
B) Class II Harness.  
C) Class III Harness.  
D) All the above.  
Answer --> D  

Kind of a trick question. The Class I harness is rated to support a 300-pound load, but all the rest can support the same load.
760) When using rope you should avoid sharp angles and bends. Sharp angles, bends, and knots can reduce the strength of a rope by as much as –

A) 5%.
B) 10%.
C) 25%.
D) 50%.

Answer --> D


761) Keep all synthetic or natural fiber ropes away from rust, which can weaken a rope in as little as –

A) 1 to 2 weeks.
B) 1 month.
C) 6 weeks.
D) 6 months.

Answer --> A


762) The record of all use, maintenance, and inspection throughout a rope's working life is known as the –

A) Rope record.
B) Rope history.
C) Rope log.
D) All the above.

Answer --> C


763) According to NFPA how many people were killed in structure fires in 2009?

A) 1260.
B) 1625.
C) 2100.
D) 2700.

Answer --> D


Structure fires injured 14,800 more.
An assessment of a facility or location made before an emergency occurs in order to prepare for an appropriate emergency response is called a –

A) Preincident survey.
B) Incident action plan.
C) Preincident action plan.
D) All the above.

Answer -->  A


Which of the following statements is not true?

A) Do not enter a building where there is little chance of finding and rescuing any viable victims.
B) If backdraft conditions are apparent, firefighters should hasten search and rescue efforts despite waiting for other fire fighting operations to commence.
C) Maintain radio contact with your supervisor.
D) Stay low and move cautiously while searching with limited visibility.

Answer -->  B


Firefighters should only enter a building showing signs of backdraft after the building has been properly ventilated.

When a firefighter encounters a door during a search and rescue operation, the firefighter should do all but which of the following?

A) Feel the door with the back of his hand.
B) Apply water to the door and look for steam.
C) Use a thermal imaging camera to access the conditions behind the door.
D) Open the door.

Answer -->  D


In fire fighting, what is meant by the term egress.

A) The point in which firefighters enter a structure.
B) The point at which firefighters exit a structure.
C) The main ventilation hole in the roof.
D) The main entrance and exit to the structure.

Answer -->  B


The point of entry into a building will not always be the way you will get out. Firefighters should always have a secondary means of egress when entering any building.
768) Any facility in which a fire, accident, or natural disaster could cause substantial casualties or significant economic harm, through either property or infrastructure damage is known as –

A) Catastrophic target.
B) Catastrophic hazard.
C) Dynamic hazard.
D) Target hazard.

Answer -->  D


769) Sizing-up a building fire upon approach, is the responsibility of which of the following?

A) The first arriving officer.
B) The Chief.
C) The Incident commander.
D) All firefighters should observe the entire building and its surroundings upon approach.

Answer -->  D


It is the initial responsibility of the first arriving officer, but all firefighters should also participate in the size-up of the building.

770) Observation of a building which is on fire, can give firefighters all the following information except –

A) How many occupants are in the building.
B) An idea of how much time it will take to effectively search the building.
C) The size of the fire.
D) The probable structural integrity of the building.

Answer -->  A


771) Firefighters who have obtained information from occupants or neighbors, regarding the number and location of victims within a building, should be relayed to the –

A) First search team within the building.
B) Second search team within the building.
C) Dispatch center.
D) Incident Commander and all incoming units.

Answer -->  D

772) When should firefighters identify their possible alternative escape routes at a structure fire?

A) As they enter the building.
B) When they arrive at the fire floor.
C) When they locate the seat of the fire.
D) Before they enter the building.

Answer --> D


Look for means of egress before you enter a building. Reassessing areas of egress is a continuous process throughout the incident. The behavior of the fire can quickly change original egress strategies.

773) The two objectives of a building search include which of the following?

A) Searching for life, and obtaining information about the location and extent of the fire.
B) Searching for life, and attacking the seat of the fire.
C) Searching for fire extension, and attacking the seat of the fire.
D) Searching for life, and searching for evidence of arson.

Answer --> A


774) A rapid, but thorough search that is performed either before or during fire suppression operations is called the –

A) Initial search.
B) Primary search.
C) Secondary search.
D) Rapid search.

Answer --> B


775) The search that is conducted after the fire has been placed under control, and the hazards are somewhat lessened is called the –

A) Final search.
B) Primary search.
C) Secondary search.
D) Tertiary search.

Answer --> C

776) What is the first thing firefighters should consider when entering a burning building in a search and rescue operation?

A) The location of the victim(s).
B) The location of the fire.
C) The exact time they connected to SCBA.
D) Their own safety.

Answer --> D


Firefighters should always use the buddy system and work in teams of two or more.

777) Primary search personnel should carry which of the following articles with them as they enter a building and throughout a search?

A) Forcible entry tools.
B) A charged hoseline.
C) An attic ladder.
D) A Stokes basket.

Answer --> A


778) Which of the following statements regarding a firefighter’s movements while searching a structure is NOT true?

A) Firefighters may perform a search walking in a upright position if there is light smoke, and little or no heat.
B) Firefighters should ascend stairs on their hands and knees.
C) Firefighters should descend stairs feet first with their body’s facing away from the stairs.
D) Firefighters who perform searches on their hands and knees often have more visibility and are exposed to less heat.

Answer --> C


However, IFSTA shows on page 433, firefighters descending a staircase during extreme fire conditions keeping their hands and feet close to the edge of the stairs and proceeding with the front of their bodies away from the stairs. When searching a building in the standing position, if you can’t see your feet through the smoke, you should not be standing.
779) When searching the fire floor of a structure fire, firefighters should –

A) Start the search at the entrance door and move as close as possible to the region of the fire.
B) Start the search as close to the fire as possible and move back toward the entrance.
C) Not search the fire floor until hoseline crews have knocked down the fire.
D) Search other floors first before attempting to search the fire floor.

Answer --> B


780) Firefighters should search for victims in which of the following locations, during structure fires?

(1) Under beds  (2) Bathtubs  (3) Closets  (4) Shower stalls  (5) Behind furniture  (6) Attics

A) 1, 2, 4.
B) 1, 5, 6.
C) 1, 3.
D) All the above.

Answer --> D


781) Which is the correct method for searching a room during the course of a structure fire?

A) The perimeter of the room is searched first, followed by a search of the middle of the room.
B) The middle of the room is searched first, followed by a search of the perimeter.
C) Rooms should be searched using a zigzag pattern.
D) There are no recommended methods for firefighters to follow in order to search a room for victims.

Answer --> A


782) All of the following statements regarding the secondary search of a building during a structure fire are false except –

A) The secondary search is performed prior to fire suppression and ventilation operations.
B) When performing a secondary search speed is more critical than thoroughness.
C) During the secondary search, only positive information should be relayed to the IC.
D) Firefighters other than those who performed the primary search should be assigned to the secondary search.

Answer --> D


Using different personnel to conduct the secondary search has the advantage of allowing the search team to use “fresh eyes” and get an unbiased view of the scene.
783) When using a search line system, 2-inch steel rings are tied into the rope along with the correct number of knots every –

A) 10 ft.  
B) 20 ft.  
C) 30 ft.  
D) 50 ft.  

Answer -->  B


784) Which of the following would represent the typical tether used in search and rescue operations?

A) 1/4-inch Kevlar sheathed rope, 20 feet long with a knot in the midpoint of the rope, and a 3/4-inch steel ring tied on one end, with a carabiner tied to the other. 
B) 3/4-inch Kevlar sheathed rope, 10 feet long with a knot tied every 3 feet in the rope, and a 1/2-inch steel ring tied on one end, with a carabiner tied to the other. 
C) 1/2-inch Kevlar sheathed rope, 20 feet long with a knot in the midpoint of the rope, and a 1/2-inch steel ring tied on one end, with a carabiner tied to the other. 
D) 1/2-inch Kevlar sheathed rope, 10 feet long with a knot in the midpoint of the rope, and two 3/4-inch steel rings tied to each end.  

Answer -->  A


Some tethers have snap hooks instead of carabiners.

785) Implementing a search line system requires a minimum team of at least –

A) 2 members.  
B) 3 members.  
C) 4 members.  
D) 5 members.  

Answer -->  B


786) When implementing a search line system the first firefighter who picks up the rope bag and enters the search area is called the –

A) Navigator.  
B) Leader.  
C) Lead.  
D) Primary rescuer.  

Answer -->  C

787) The second firefighter in a search line system that enters shoulder-to-shoulder behind the first firefighter is called the –

A) Navigator.  
B) Secondary rescuer.  
C) Backup.  
D) Tail.  

Answer --> A


The Navigator should be equipped with a hand light and TI (Thermal Imager) if available.

788) Who directs the search during a search line system operation?

A) The Lead.  
B) The Navigator.  
C) The IC.  
D) All the above.  

Answer --> B


789) You are at the scene of a four story structure fire, in which the fire has developed on the ground floor. In which order should the floors of this multistory building be searched?

A) 1st, 2nd, 3rd, and 4th.  
B) 4th, 1st, 2nd, and 3rd.  
C) 1st, 2nd, 4th, and 3rd.  
D) 2nd, 1st, 4th, and 3rd.  

Answer --> C


The fire floor should always be searched first, followed by the floor just above the fire floor, followed by the top floor, and then followed by all subsequent floors.

790) In most cases, which of the following is the best way for a team of firefighters to search a small room for victims?

A) The firefighters enter the room and search the perimeter, then the center of the room, with the firefighter in the back keeping in constant physical contact with the firefighter in front.  
B) The firefighters enter the room, with one firefighter going left and the others going right, and eventually meeting somewhere in between.  
C) One firefighter remains at the door, while the others search the room, with all in constant voice contact with each other.  
D) Firefighters each search a room by themselves and meet up at a predetermined location upon completing the search.  

Answer --> C


This is call the oriented-search method. Small rooms can also be searched with the use of a
791) After searching a room, which of the following marking systems are not recommended?

A) Fold a mattress sideways on the bed.
B) Using chalk, masking tape, or crayons to mark doors.
C) Latch straps or hang tags on the doorknob.
D) Use the two part marking system on the door.

Answer --> A


This method is no longer recommended because it requires rescuers to enter the room in order to discover the marking system. The rescuer should not have to enter the room in order to discover that the room has already been searched.

792) All of the following statements regarding search and rescue operations are true except –

A) A firefighter should feel the bottom of a door before opening it.
B) If a door is excessively hot, it should not be opened until a charged hoseline is in place.
C) When opening doors, firefighters should not remain in front of the door as it is being opened.
D) Apply a short burst of water fog above the door to cool the gases at the ceiling before opening the door.

Answer --> A


Firefighters should always check for heat at the top of the door. They should also check the doorknob as well.

793) Firefighters who are injured, trapped or disoriented should –

A) Remain calm and stay in one place until they are found.
B) Locate a hoseline and follow the female coupling out of the building.
C) Activate their PASS devices.
D) All of the above.

Answer --> C


If you are unsure of your location, you can momentarily turn off your PASS device and listen for sounds that provide clues of your location, such as traffic, crews working with tools, or the sound of a pumper. Also be aware that you should follow the male coupling out of the building and not the female coupling. Last, try to remain calm.
All Chapters

794) Firefighters who have become disoriented and can not find their way out of the building should do all of the following except –

A) Try to position themselves in the center of the room.
B) Tap the floor with a tool or find another way of making noise.
C) Attempt to position their flash light so that it shines towards the ceiling.
D) Activate their pass device.

Answer --> A


795) All the following statements regarding the removal of a downed firefighter are FALSE except –

A) Search teams looking for lost firefighters should stop often and remain perfectly quiet so they may hear calls for help or PASS devices from injured or disoriented firefighters.
B) If an injured firefighter is discovered, injuries should be stabilized before the firefighter is removed, no matter how hostile the environment is.
C) If the downed firefighter’s SCBA is not functioning, rescue firefighters should remove their masks and assist in buddy breathing.
D) Firefighters should always make an attempt to locate downed victims no matter if the fire has progressed to a point where viable victims are unlikely to be found.

Answer --> A


796) When a victim is lying unconscious in a life threatening environment the rescuer should –

A) Think first about moving the victim to a safe haven before tending to any injuries.
B) Not move the victim until a cervical collar is placed around the victim’s neck.
C) Not move the victim until he/she is placed on a long backboard.
D) Control any perfuse bleeding before moving the patient.

Answer --> A

797) Which NFPA standard requires a rapid intervention crew (RIC) be standing by whenever firefighters are in the hazard zone?

A) NFPA 1001.
B) NFPA 1609.
C) NFPA 1500.
D) NFPA 1990.

Answer --> C


798) The hazard zone is defined as –

A) Any area where firefighters are engaged in working to mitigate a problem.
B) Any portion of a building that contains an IDLH atmosphere.
C) The red zone.
D) Any hazardous area that could prove dangerous to firefighters working.

Answer --> B


799) A RIC is composed of at least __ who are suitably equipped to enter the hazard zone to locate and rescue firefighters in distress.

A) 2
B) 3
C) 4
D) 5

Answer --> A


800) Some fire departments use digital radio tracking devices to help locate firefighters in distress. These tracking devices normally will have a range of –

A) 100 feet.
B) 250 feet.
C) 500 feet.
D) 1000 feet.

Answer --> A

801) Which of the following statements in regard to locating and rescuing a downed firefighter is not true?

A) Request assistance if the firefighter is trapped or injured.
B) Continually call out the victim's name, so the victim can respond, thus hastening the rescue effort.
C) Notify Command of the firefighter's location and status.
D) Check vital signs if the firefighter is unconscious.

Answer -->  B


802) Emergency moves are essential under all of the following situations except –

A) There is fire or the danger of fire in the immediate area.
B) It is impossible to protect the accident scene.
C) It is impossible to gain access to other victims who need immediate medical care.
D) The patient has possible spinal cord injuries.

Answer -->  D


803) When it is necessary to perform an emergency move, which method should firefighters employ to remove a victim from a hazardous environment?

A) The victim should be pulled in the direction of the short axis of the body.
B) The victim should be pulled in the direction of the long axis of the body.
C) The victim should always be pulled on a blanket.
D) It does not matter how the victim is removed during an emergency move.

Answer -->  B


804) One rescuer can safely carry a –

A) Child.
B) Child, or Adult Woman.
C) Child, Adult Woman, or Adult Male.
D) None of the above. Two rescuers are always required to carry any victim.

Answer -->  A

805) The __ is the type of carry in which, a lone firefighter places one arm under the victim’s arms and across the back, and places the other arm under the victim’s knees. Keeping his back straight, the victim is lifted to waist height.

A) The Fireman's Carry.
B) Extremities Lift/Carry.
C) Chair Lift/Carry.
D) Cradle-In-Arms Lift/Carry.

Answer -->  D


This care is not practical for unconscious adults because of the victim’s weight and relaxed body, and the difficulty in supporting the head and neck.

806) The victim is raised to a sitting position. The two rescuers link arms across the victim’s back. With their other arms they reach under the victim’s knees to form a seat. Which of the following lifts and carries does this best describe?

A) Two Person Lift/Carry.
B) Two Rescuer Seat/Lift Carry.
C) Incline Drag.
D) Two Rescuer Extremities Lift/Carry.

Answer -->  B


807) Which of the following lifts/drag would you use to move a victim up or down a stairway?

A) The Two Rescuer Extremities Life/Carry.
B) The Cradle-In-Arms Lift/Carry.
C) The Incline Drag.
D) The Blanket Drag.

Answer -->  C

808) The victim is placed in a supine position. The rescuer kneels by the victim’s head and supports the head and neck. The rescuer lifts the victim’s upper body into a sitting position, and reaches under the victim’s arms to grasp her wrists. The rescuer then stands and is now able to ease the victim down a stairway or ramp to safety. This best describes which of the following?

A) The Two Rescuer Extremities Life/Carry.
B) The Cradle-In-Arms Lift/Carry.
C) The Incline Drag.
D) The Blanket Drag.

Answer --> C


809) Which of the following lifts/drags would you use webbing that has been wrapped around the victim’s body?

A) The Two Rescuer Extremities Life/Carry.
B) The Cradle-In-Arms Lift/Carry.
C) The Incline Drag.
D) The Webbing Drag.

Answer --> D


810) One of the most common types of litters used by fire service personnel are –

A) Ambulance cots.
B) Scoop stretchers.
C) Long backboards.
D) Basket litters.

Answer --> C


811) The ongoing evaluation of influential factors at the scene of an incident is commonly called –

A) Size–up.
B) On–scene evaluation.
C) Situational size–up.
D) Incident evaluation.

Answer --> A

812) Size-up involves observing the scene of an incident in order to answer which of the following questions?

A) What has happened?
B) What is happening?
C) What is going to happen?
D) All of the above.

Answer --> D


813) Striking the surface of a roof or floor to determine its structural integrity or locate underlying support members with the blunt end of a hand tool is normally called –

A) Probing.
B) Testing.
C) Resonating.
D) Sounding.

Answer --> D


814) To operate independently of the incident commanders command and control is called –

A) Moonlighting.
B) Freelancing.
C) Self-commanding.
D) Self-guidance.

Answer --> B


815) To reignite because of latent heat sparks or smoldering embers defines which of the following?

A) Spontaneous combustion.
B) Spontaneous reignition.
C) Rekindle.
D) Latent combustion.

Answer --> C

816) Which of the following statements in regard to thermal imagers is correct?

A) Thermal imagers cannot detect a person under or behind furniture.
B) Thermal imagers cannot detect a person standing on the opposite side of a wall.
C) Thermal imagers cannot see through water or glass.
D) All the above.

Answer -->  D


The term Thermal Imagers has replaced Thermal Imaging Cameras.

817) Sheltering–in–place involves moving victims to a protected location within the structure. It is used in all the following situations except –

A) It is safer to keep victims inside the structure.
B) There is a major hazard present.
C) The victims are incapacitated and cannot be moved.
D) There is limited staffing to assist with evacuation.

Answer -->  B


Sheltering–in–place should be used when the hazard is minor. Also, the structure can provide a protective barrier between the victim and the hazard.

818) What is the first step firefighters should take after a Mayday communication has been broadcast?

A) All radio traffic ceases and only traffic relating to the Mayday is allowed.
B) The communication center allocates an available radio channel specifically for the Mayday communications.
C) Nonessential activity ceases and units are directed to assist was searching for the firefighter who has broadcast the Mayday.
D) The Rapid Intervention Team (RIT) is dispatched to locate the downed firefighter.

Answer -->  A


819) What is the acronym firefighters who broadcast a MAYDAY distress message use to help them remember what information to provide the IC?

A) HOPE.
B) SCOPE.
C) LUNARS.
D) HELP.

Answer -->  C


L – Location
U – Unit
N – Name
A – Assignment
820) The point at which air in the SCBA will last only long enough to exit a hazardous atmosphere is known as –

A) Fail–safe.
B) The acute state.
C) The emergency range.
D) The point of no return.

Answer -->  D


821) During a MAYDAY situation, what is a leading contributor to firefighter death?

A) Panic.
B) Disorientation.
C) Fire intensity.
D) Inexperience.

Answer -->  A


822) Never underestimate the time and personnel required to rescue a downed firefighter. Carrying one unconscious firefighter can require four rescuers, and fully removing the firefighter from the hazard zone may require as many as ___ rescuers.

A) 4
B) 6
C) 8
D) 12

Answer -->  D


823) Emergency scene lighting is required at which of the following incidents?

A) All incidents that occur at night.
B) All incidents that occur in low–light conditions.
C) Inside structures were normal lighting is not available.
D) All the above.

Answer -->  D

824) A portable device for generating auxiliary electrical power is called a –

A) Powerplant.
B) Generator.
C) Alternator.
D) Dynamo.

Answer -->  B


Generators are typically powered by diesel or gasoline engines and usually have 110 or 220 volt capacity outlets.

825) A mechanism that allows the vehicle engine to power equipment such as a pump, winch, or portable tool is known as –

A) Power takeoff (PTO).
B) Alternator.
C) Inverter.
D) Generator.

Answer -->  A


826) A step-up transformer that converts a vehicle's 12 or 24 volt DC current into 110 or 220 volt AC current is called –

A) Alternator.
B) Inverter.
C) Auxiliary transformer.
D) Powerplant.

Answer -->  B


827) All of the following would be considered auxiliary electrical equipment except –

A) Electrical cables, connectors, and extension cords.
B) Receptacles and connectors.
C) GFCI devices and junction boxes.
D) Auxiliary lighting devices and generators.

Answer -->  D

828) The term that describes equipment that is approved for use in flammable atmospheres and is incapable of releasing enough electrical energy to ignite the flammable atmosphere is called –

A) Intrinsically safe.
B) UL approved.
C) Flash proof.
D) All the above.

Answer --> A


Auxiliary equipment at the fire scene must be waterproof, intrinsically safe, and designed for the amount of electrical power its intended to carry.

829) A device designed to protect against electrical shock is known as a –

A) Ground fault circuit interrupter (GFCI).
B) Surge protector.
C) Power strip.
D) All the above.

Answer --> A


830) Vehicle–mounted generators normally have output capabilities of 110 and 220 volts, with capacities up to __ kilowatts.

A) 15
B) 25
C) 35
D) 50

Answer --> D


Vehicle–mounted generators with a separate engine can be noisy, making communication near them difficult. Hearing protection is required when using generators. Also, the exhaust fumes from the generator can contaminate the scene if the vehicle is not positioned downwind.

831) All of the following would be considered cutting tools except –

A) Claw tool.
B) Flat–head axe.
C) Reciprocating saw.
D) Chain saw.

Answer --> A


A claw tool is a prying tool.
832) Handsaws commonly used by firefighters include all of the following except –

A) Drywall saws.
B) Keyhole saws.
C) Dovetail saws.
D) Hacksaws.

Answer --> C


833) Which power saw best describes a saw with a short straight blade, which moves forward and backward with an action similar to that of a handsaw?

A) Chain saw.
B) Ventilation saw.
C) Rotary saw.
D) Reciprocating saw.

Answer --> D


834) Both pick-head and flat head axes normally come in which of the following head weights?

(1) 4 lb. (2) 6 lb. (3) 8 lb. (4) 10 lb.

A) 1, 2.
B) 2, 3.
C) 3, 4.
D) All the above.

Answer --> B


835) A gasoline powered saw with changeable blades available for cutting wood, metal, and masonry, best describes which of the following saws?

A) Chain saw.
B) Ventilation saw.
C) Rotary saw.
D) Reciprocating saw.

Answer --> C

836) Firefighters should use bolt cutters for all the following purposes except –

A) Cutting iron bars.
B) Cutting cables.
C) Cutting chains.
D) Cutting case-hardened materials found in locks and other security devices.

Answer --> D


837) In instances where firefighters must cut through high-security devices, the tool of choice would be which of the following?

A) Bolt cutters.
B) Cutting torches.
C) Hacksaws.
D) Chisels.

Answer --> B


These cutting torches have diminished use in the fire service because of safety concerns.

838) All of the following are examples of prying tools with the exception of –

A) Halligan tool.
B) Claw tool.
C) Kelly tool.
D) Center punch.

Answer --> D


The center punch is a striking tool.

839) Which hydraulic rescue tool is effective in spreading a door frame far enough apart, to allow the door to swing open?

A) Spreaders.
B) Hydraulic door opener.
C) Shears.
D) Combination tool.

Answer --> B


Answer change from last version. Old answer was – Ram.
840) All of the following tools would be considered Pushing/Pulling tools except –

A) San Francisco hook.
B) Pike pole.
C) Pick.
D) Clemens hook.

Answer --> C


841) The tool which has two knife-like wings that depress as the head is driven through an obstruction and reopened or spread outward under the pressure of self-contained springs is called a(an) –

A) Plaster hook.
B) Pike pole.
C) Clemens hook.
D) Drywall hook.

Answer --> A


842) Pushing/Pulling tools are intended for just that, and are not normally used for prying. Which of the following can be thought of as an exception to this rule.

A) San Francisco hook.
B) Drywall hook.
C) Roofman's hook.
D) Multipurpose hook.

Answer --> C


843) Which of the following forcible entry tools would be classified as a “Striking Tool?”

A) Halligan tool.
B) Rabbit tool.
C) Center punch.
D) Pike pole.

Answer --> C

844) Which of the following statements regarding forcible entry tools is true?

A) More leverage can be safely obtained on pry bars, if assisted with a "cheater bar."
B) To protect axe heads from rusting, they should be painted with a quality antirust paint.
C) In order to be kept in peak condition axe heads should be kept extremely sharp.
D) None of the above.

Answer -->  D


Painting metal surfaces hides cracks and other defects. Using a cheater bar puts forces on the tool greater than it was designed to withstand. Over sharpening an axe will make it prone to chipping as well as be difficult to remove from the surface it was swung into.

845) Which of the following statements regarding circular saws is NOT true?

A) Do not use one manufacturer's sawblade with another manufacturer's saw.
B) Keep equipment together. Spare saw blades, the saw, and gasoline should be stored in the same compartment.
C) Do not use any power saw when working in a flammable atmosphere or near flammable liquids.
D) Store blades in a clean dry environment.

Answer -->  B


Storing blades in the same compartment as the fuel will cause damage to the blades, because hydrocarbons will attack the bonding material in the blades and make them vulnerable to sudden and violent disintegration during use.

846) Which is the proper method for carrying a fire axe?

A) Carried over the firefighter's shoulder.
B) Hand shielding point and blade facing toward the firefighter's body.
C) Hand shielding point and blade facing away from the firefighter's body.
D) Any of the above.

Answer -->  C


847) One of the best tools for breaking a window would be a –

A) Pick–head axe.
B) Halligan.
C) Pike pole.
D) Battering ram.

Answer -->  C

848) All of the following statements are true regarding the care of fire axes except –

A) Always file an axe blade by hand, grinding will take the temper out of the metal.
B) Paint or varnish axe handles to protect against roughness and warping.
C) Do not paint the axe head.
D) Sand handles to eliminate splinters, and applied a coat of boiled linseed oil to preserve the handle.

Answer -->  B


Actually tung oil would be a better choice than linseed oil. Tung oil is more water resistant, and linseed oil can break down.

849) Which of the following is the safest method of carrying a pike pole OUTSIDE a structure?

A) Vertically with the head upright and close to the body.
B) Over the firefighter’s shoulder.
C) Sharp end in front of the firefighter and lowered.
D) Sharp end in front of the firefighter and raised.

Answer -->  C


850) What is the most important factor a firefighter should consider, when carrying small hand tools from the apparatus to the scene?

A) The firefighter should move the tools from apparatus to the scene as quickly as possible.
B) The firefighter should never overload himself with tools which can cause fatigue.
C) The firefighter should carry as many tools as possible to save time and man power.
D) The firefighter should carry tools as safely as possible, without injuring himself(herself) or other firefighters.

Answer -->  D


851) The safest method of carrying a pike pole INSIDE a structure is carry it –

A) Vertically with the head upright and close to the body.
B) Over the firefighter’s shoulder.
C) Sharp end in front of the firefighter and lowered.
D) Sharp end in front of the firefighter and raised.

Answer -->  A

852) Before attempting to force a door open, the firefighter should always check –

A) If he has the correct tool for the specific locking mechanism.
B) If the door opens inward or outward.
C) If the door is locked.
D) The type of construction materials the door is made from.

Answer --> C


Try before you pry!

853) Firefighters should remember which of the following when passing through an opening protected by a fire door?

A) The fire door should be closed as soon as you pass through it.
B) The firefighter should have an adequate water and air supply, before passing through and closing a fire door.
C) The fire door should be blocked to prevent closing, thus trapping the firefighter or cutting off the water supply in the hoseline.
D) Fire doors should be removed from their frames before passing through them.

Answer --> C


854) The lock mechanism designed to fit into a cavity in a door, which consists of a latch mechanism and an opening device, describes which of the following types of locks?

A) Mortise lock.
B) Bored lock.
C) Rim lock.
D) Padlock.

Answer --> A


855) Which of the following would be considered a portable or detachable locking device?

A) Mortise lock.
B) Bored lock.
C) Rim lock.
D) Padlock.

Answer --> D

856) One of the most common locks in use today, is a surface mounted lock with an interlocking dead bolt. Which of the following locks does this best describe?

A) Mortise lock.
B) Bored lock.
C) Rim lock.
D) Padlock.

Answer --> C


857) A key–in–knob lock best describes which of the following types of locks?

A) Mortise lock.
B) Cylindrical lock.
C) Rim lock.
D) Padlock.

Answer --> B


CodeRQ

Answer changed from Bored Lock to Cylindrical Lock. Cylindrical locks are the most common type of locksets found in residential applications.

858) In conventional forcible entry, which of the following offers the best tool combination, to use for a large variety of forcible entry situations?

(1) 8 lb. flat–head axe  (2) Halligan bar  (3) Center punch  (4) Battering Ram  (5) Hammerheaded Pick

A) 1, 2.
B) 1, 3.
C) 3, 5.
D) 2, 3.

Answer --> A


Often called a set of irons.
859) One of the fastest and least destructive ways to force locked doors in order to gain access to a structure is to attempt to –

A) Break the glass near the door or in the door.
B) Break the glass in the window you feel is closest to the fire.
C) Force the door jamb to obtain entry.
D) Pull the lock cylinder.

Answer --> A


860) Which side of a window should a firefighter stand before attempting to break it?

A) Leeward side.
B) Windward side.
C) Directly in front of the window.
D) Downwind.

Answer --> B


CodeRQ

Windward is the direction upwind from the point of reference. Leeward is the direction downwind from the point of reference.

861) If the door opens towards a firefighter, which side of the door do the hinges lie?

A) On the same side of the door as the firefighter.
B) On the opposite side of the door as the firefighter.
C) The hinges are not visible from either side.
D) The hinges could be mounted on either side.

Answer --> A


862) If it becomes necessary to break through a tempered glass door, the best technique is which of the following?

A) Shatter the glass using the pick end of a pick-head axe, with the point of impact at the bottom corner of the glass panel.
B) Shatter the glass with a spring-loaded punch, with the point of impact in the center of the glass panel.
C) Shatter the glass with a battering ram, with the point of impact in the center of the glass panel.
D) Shatter the glass using a closet hook, with the point of impact at the bottom corner of the glass panel.

Answer --> A


Suitable face and eye protection should be used. Some firefighters use a salvage cover to shield the door which protects them from injury.
863) A tool designed for pulling lock cylinders, that has a sharp notch with cutting edges machined into the tool, and is designed to cut behind the protective collar of a lock cylinder, thus maintaining a hold so the lock can be pried out, best describes which of the following forcible entry tools?

A) K-Tool.
B) A-Tool.
C) J-Tool.
D) Shove Knife.

Answer --> B


864) Which forcible entry tool is useful in pulling all types of lock cylinders including, rim, mortise and tubular?

A) K-Tool.
B) A-Tool.
C) J-Tool.
D) Shove Knife.

Answer --> A


865) Resembling a wide-bladed putty knife with a notch cut in one edge of the blade, this forcible entry tool provides firefighters rapid access to outward swinging latch-type doors. Which of the following tools does this best describe?

A) K-Tool.
B) A-Tool.
C) J-Tool.
D) Shove Knife.

Answer --> D


866) The forcible entry tool designed to fit through the space between double swing doors, allowing the firefighter to operate doors equipped with panic hardware best describes which of the following forcible entry tools?

A) K-Tool.
B) A-Tool.
C) J-Tool.
D) Shove Knife.

Answer --> C

867) All of the following would be considered good tools for forcing entry through padlocks except –

A) Duck–Billed Lock Breaker.
B) Locking Pliers and Chain.
C) Bam–Bam Tool.
D) A–Tool.

Answer -->  D

The A–Tool is for pulling door locks.

868) A wedged shape tool that will widen and break the shackles of padlocks is called –

A) Duck–billed lock breaker.
B) Bam–Bam tool.
C) Hockey puck lock breaker.
D) Locking pliers and chain.

Answer -->  A


869) Bam–bam tools are effective on all padlocks with the exception of –

A) Master locks.
B) American locks.
C) Locks with case–hardened retaining rings.
D) All the above.

Answer -->  D


870) The tool that uses case–hardened screws, which are driven into the actual keyway lock mechanism of a padlock, that with assistance of the sliding hammer will pull the lock tumbler out of the padlock body is called –

A) Duck–billed lock breaker.
B) Bam–Bam tool.
C) Hockey puck lock breaker.
D) Hammerheaded pick.

Answer -->  B


This technique will not work with Master Locks, American Locks and other high quality locks.
871) Cutting a padlock using a power rotary saw or cutting torch requires two firefighters. While one firefighter is doing the cutting, what should the other firefighter be doing?

A) Preventing other firefighters from entering the immediate area where the cutting is taking place.
B) Assisting the first firefighter in steadying the cutting tool.
C) Should hold tension on the padlock using locking pliers and chain.
D) Readies potential backup tools in case the cutting tool fails to cut through the padlock.

Answer --> C


872) The best tool for cutting through barbed wire fences is by using –

A) Wire cutters.
B) Bolt cutters.
C) Composite metal cutting rotary saw.
D) Cutting torch.

Answer --> B


873) The best tool for cutting through chain-link fences is –

A) Wire cutters.
B) Bolt cutters.
C) Composite metal cutting rotary saw.
D) Cutting torch.

Answer --> C


874) Firefighters attempting to cut through wire fences should cut the fence –

A) Close to the posts.
B) In the center of the fence.
C) Diagonally from left to right.
D) Does not matter.

Answer --> A


Cutting near the posts lessens the danger of injury from the whip coil of loosened wires. It also facilitates repair after the incident.
875) __ windows are windows that usually consist of two sashes that meet in the center that are locked together with a latch or a bolt on the inside.

A) Checkrail.
B) Casement.
C) Projected.
D) Jalousie.

Answer --> A


Also known as Double-Hung windows.

876) The type of window often called "crank out window" best describes which of the following?

A) Awning windows.
B) Jalousie windows.
C) Checkrail windows.
D) Casement windows.

Answer --> D


877) Which window is usually associated with factories, warehouses, and other commercial or industrial locations?

A) Casement windows.
B) Projecting windows.
C) Awning windows.
D) Jalousie windows.

Answer --> B


878) The best method of forcible entry for a projecting window is which of the following?

A) Use hydraulic power tools.
B) Break the glass in the window or by cutting the window panel out of the frame.
C) Force the window open using standard forcible entry hand tools.
D) Seek another way to enter the building.

Answer --> B


CodeRQ

Answer change from last version. D was the old answer.
879) __ consists of large sections of glass usually about 1 foot in width, and are as long as the width of the opening of the window.

A) Awning windows.
B) Jalousie windows.
C) Projected windows.
D) Casement windows.

Answer --> A


880) __ have small 4 inch wide sections that run as long as the window’s width, and normally constructed without frames.

A) Awning windows.
B) Jalousie windows.
C) Projected windows.
D) Casement windows.

Answer --> B


Also called louvered windows.

881) The most effective method to gain entry through a Lexan plastic window is –

A) With a rotary saw mounted with a carbide tip.
B) Discharging a CO2 extinguisher onto the window and striking it with a pick–head axe.
C) Melting the window with a propane torch.
D) Using a center–punch on a lower corner of the window.

Answer --> A


Testing by an independent engineering company proved that cooling Lexan windows with carbon dioxide before striking them does not make them easier to break.

882) Lexan windows are __ times stronger than safety glass.

A) 10.
B) 30.
C) 100.
D) 250.

Answer --> D


They are also 30 times stronger than acrylic.
883) All of the following would be classified as the best way to breach masonry or concrete walls except –

A) Electric jackhammers.
B) Pneumatic jackhammers.
C) Rotary rescue saws with masonry blades.
D) Battering rams.

Answer --> D


884) A firefighter who is attempting to open up a floor should keep in mind that floor joists are spaced __ apart.

A) 14 inches.
B) 16 inches.
C) 18 inches.
D) 12 to 24 inches.

Answer --> D


885) When attempting to force an inward swinging door using conventional forcible entry tools, firefighters should place the fork of the Halligan tool in which of the following locations?

(1) Just above the lock  (2) Just below the lock  (3) Even with the lock  (4) At the top of the door

A) 1 or 2.
B) 3.
C) 4.
D) 3 or 4.

Answer --> A


886) All of the following statements regarding cutting through metal walls is true except –

A) Cutting through a metal wall should be done only after careful size-up.
B) Be sure there are no building utilities in the area to be cut.
C) Conventional forcible entry tools cannot cut the metal panels.
D) The opening should be cut to at least 6 feet tall.

Answer --> C


Conventional forcible entry tools such as an axe, rotary saw, or air chisel can cut through the thin metal panels with relative ease.
887) When attempting to breach a metal wall, if a firefighter can not locate any studs, he/she should assume that the wall bears the full load of the structure. In order to reduce the chance of collapse the firefighter should cut an inspection hole in the wall in the shape of a –

A) Square.
B) Triangle.
C) Circle.
D) Rectangle.

Answer -->  B


888) When breaking a window, the firefighter should strike the pane at the –

A) Top of the pane.
B) Bottom of the pane.
C) Center of the pane.
D) Any of the above.

Answer -->  A


889) Which is considered the most common types of cutting tools used by firefighters?

A) Axes.
B) Pike poles.
C) Power saws.
D) Reciprocating saws.

Answer -->  A


Pike poles are Pushing/Pulling tools.

890) A prying tool with a claw at one end and a spike or point at a right angle to a wedge at the other end describes which of the following?

A) Crowbar.
B) Halligan tool.
C) Hux bar.
D) Rambar.

Answer -->  B

891) Which device is a relatively new cutting system, fueled by a mixture of gasoline and oxygen, and is being used by a growing number of fire/rescue departments in North America.

A) Oxyacetylene cutting torches.
B) Oxyoctane cutters.
C) Oxycarbonate cutters.
D) Oxygasoline cutting torches.

Answer --> D


892) Which manual prying tool requires only one operator and is most effective for opening locked doors?

A) Ram.
B) Halligan bar.
C) Rambar.
D) Claw tool.

Answer --> C


893) I am a manually-operated spreader. I am relatively lightweight and consist of a hand pump and spreader device. What am I?

A) Hydraulic prying tool.
B) Hydraulic door opener.
C) Hand-pump door opener.
D) Hand spreader tool.

Answer --> B


894) Which Pushing/Pulling tool is used for moving loose material that contains hidden fires, such as hay and burning debris?

A) Clemens hook.
B) Multipurpose hook.
C) Roofman's hook.
D) Rubbish hook.

Answer --> D


As the name implies, it can also be used to move around loose trash to find hidden fire.
895) The tool of choice for pulling down ceilings and opening interior walls is a –

A) Pike pole.
B) Drywall hook.
C) San Francisco hook.
D) Clemens hook.

Answer --> A


896) The typical set of "irons" is made up of –

A) Halligan bar and pike pole.
B) Halligan bar and pick-head axe.
C) Halligan bar and flat-head axe.
D) Halligan bar and rambar.

Answer --> C


897) Never carry a running power tool more than –

A) 5 feet.
B) 10 feet.
C) 15 feet.
D) 20 feet.

Answer --> B


898) A hydraulic spreading tool that is specially designed to open doors that swing inward is called a –

A) Rabbit tool.
B) Rabbit ram.
C) Hydraulic door opener.
D) Hinge ram.

Answer --> A

899) A horizontal wooden or steel security bar held in place across a door by wooden or metal stirrups attached to the inside of the door are called –

A) Block-bars.
B) Lock-bars.
C) Drop bars.
D) Door bars.

Answer -->  C


900) The type of window made from two separate sashes – one is fixed and the other slides on a track similar to a glass patio door is called a –

A) Hopper window.
B) Tilt-turn window.
C) Slider.
D) Fixed window.

Answer -->  C


It is also called a glider window.

901) Which window is also known as a picture window, in which it is composed of a solid glass unit that does not open?

A) Hopper window.
B) Tilt-turn window.
C) Glider.
D) Fixed window.

Answer -->  D


Breaking picture windows can let a great deal of air into a building that may seriously affect ventilation efforts.

902) Opening a hole in a wall is known as –

A) Rupture.
B) Infringement.
C) Break.
D) Breaching.

Answer -->  D

903) Where forcible entry will occur is determined by your supervisor or incident commander, and is based on which of the following factors?

A) Tactics that must be fulfilled.
B) The stage and location of the fire or hazard.
C) Effective ventilation and the amount of effort required to force entry.
D) All the above.

Answer -->  D


904) Door locks can be divided and all but which of the following basic types?

A) Mortise lock.
B) Cylindrical lock.
C) Rim lock.
D) Combination lock.

Answer -->  D


905) The easiest way to breach modern deadbolts in wooden residential doors is to –

A) Force the door itself.
B) Remove any windows that may be present.
C) Cutting into the door to remove the locking mechanism.
D) Pulling the lock cylinder from the door.

Answer -->  A


906) The type of rim lock that has a spring-loaded bolt with a beveled edge facing the door frame is known as a –

A) Dead bolt.
B) Night latch.
C) Vertical dead bolt.
D) Horizontal dead bolt.

Answer -->  B


This feature allows the door to lock when it is closed.
907) The type of rim lock that has a bolt that slides vertically into the receiver and does not cross the door opening is known as –

A) Dead bolt.
B) Night latch.
C) Vertical dead bolt.
D) Horizontal dead bolt.

Answer --> C

This feature makes it impossible to open the door by spreading the door from the doorjamb.

908) The type of rim lock that has a rectangular bolt that must be manually retracted before the door can be closed and the bolt engaged with the receiver is known as –

A) Dead bolt.
B) Night latch.
C) Vertical dead bolt.
D) Horizontal dead bolt.

Answer --> A

If the bolt is extended, the door cannot be closed.

909) The multiple bolt or multi lock is a dead bolt lock that, when engaged, projects ___ into two or more points on the edge of the door.

A) 3/4 inches.
B) 1 inch
C) 1 1/4 inches.
D) 1 1/2 inches.

Answer --> B


910) This type a lot consists of an electromagnet attached to the door frame and an armature plate mounted on the door.

A) Electromagnetic lock.
B) Magnetic lock.
C) Electronic keyless lock.
D) A and B.

Answer --> D

911) Often seen in hotel rooms, this security device consists of a frame-mounted plate with a shaft and knob and a hinged U-shaped shackle that mounts on the door.

A) Door chain.  
B) Surface bolt.  
C) Door limiter.  
D) Drop bar.  

Answer -->  C  

912) This is a classic supplemental locking device for residential doors that permits the door to be open wide enough to see and speak to a visitor, but still restrict access.

A) Door chain.  
B) Surface bolt.  
C) Door limiter.  
D) Drop bar.  

Answer -->  A  

913) This is a manually operated supplemental locking device that can be mounted on most stores and some windows.

A) Door chain.  
B) Surface bolt.  
C) Door limiter.  
D) Drop bar.  

Answer -->  B  

914) This security device consists of brackets that are mounted or welded to the door and a wooden or metal bar that rests in the brackets and extends across the door frame.

A) Door chain.  
B) Surface bolt.  
C) Door limiter.  
D) Drop bar.  

Answer -->  D  
915) In this security device, flush bolts are installed in the edge of one side of a set of double doors. This permits one side to remain locked while the other door is use for entry and exit.

A) Internal-mounted bolt.
B) Surface bolt.
C) Recessed surface bolt.
D) Sliding surface bolt.

Answer --> A


916) With the exception of ____, the remaining locking devices may be easily force depending on the tool used.

A) Door chain.
B) Surface bolt.
C) Door limiter.
D) Drop bar.

Answer --> D


917) A device consisting of a bar turning about a fixed point, using power or force applied at a second point to lift or sustain an object at a third point is called a –

A) Fulcrum.
B) Pulley.
C) Billet.
D) Lever.

Answer --> D


918) A support or point of support on which a lever turns in raising or moving something is called a –

A) Fulcrum.
B) Pulley.
C) Billet.
D) Cradle.

Answer --> A

919) A wedge-shaped blade attached at right angles to the handle of a tool is called a –

A) Chopper.
B) Right-angle cutter.
C) Adz.
D) Point.

Answer -->  C


920) Which of the following statements are true?

A) How well an ax head is maintained directly affects how well it will perform.
B) If an ax blade is extremely sharp and the ground is too thin, pieces of the blade will break off when cutting into material.
C) If the ax blade is too thick, regardless of its sharpness, it will be difficult to drive the ax head through ordinary objects.
D) All the above.

Answer -->  D


921) When attempting to breach a Housing and Urban Development (HUD) window, what would be your first step?

A) Use a rotary saw to cut off the heads of the carriage bolts.
B) Swing a pick ax at the carriage bolts to push them through the plywood.
C) Pry the plywood away from the window frame using a Halligan bar.
D) Force the window using a hydraulic ram.

Answer -->  A


922) The lowest, widest section of an extension ladder is called the –

A) Beam section.
B) Bed section.
C) Butt section.
D) Guide section.

Answer -->  B


Also called the base section.
923) The main structural member of a ladder supporting the rungs or rung blocks is known as the –

A) Base.
B) Beam.
C) Butt.
D) Dog.

Answer -->  B


924) Roof ladders have a pair of sharp curved devices, that help prevent the ladder from slipping from a roof. These are known as –

A) Dogs.
B) Flies.
C) Pawls.
D) Hooks.

Answer -->  D


925) The rope or cable used to hoist a section of a ground ladder is known as the –

A) Fly.
B) Guides.
C) Halyard.
D) Pawls.

Answer -->  C


926) The bottom end of the ladder is known as the heel or –

A) Bottom.
B) Butt.
C) Beam.
D) Spurs.

Answer -->  B


Also known as the base.
927) The upper most section of a ground or aerial ladder is known as the –

A) Fly Section.
B) Beam.
C) Pawls.
D) Halyard.

Answer --> A


928) The safety plates or spikes attached to the butt end of ground ladders are known as –

A) Dogs.
B) Pawls.
C) Butt Spurs.
D) Hooks.

Answer --> C


929) The cross members of a ladder in which the firefighter stands are known as –

A) Rails.
B) Plates.
C) Beams.
D) Rungs.

Answer --> D


930) Devices attached to the inside of the ladder beams, which hold fly sections in place are known as –

A) Pawls.
B) Dogs.
C) Ladder Locks.
D) All the above.

Answer --> D

931) The small grooved wheel, that the halyard is pulled through, to raise extension ladders is referred to as the –

A) Guide.  
B) Pulley.  
C) Toggle.  
D) Truss.  

Answer --> B


932) Ladders that are not adjustable and have no flies are called –

A) Aerial ladders.  
B) Extension ladders.  
C) Fixed ladders.  
D) Single ladders.  

Answer --> D


They are also sometimes called wall ladders or straight ladders.

933) Wood or metal strips, in the form of slots or channels on extension ladders, that assist in guiding the fly as it is being raised and lowered are called –

A) Channel slots.  
B) Guides.  
C) Fly supports.  
D) Protection plates.  

Answer --> B


934) The special label affixed to the inside of each beam of each ladder serves what purpose?

A) Indicates the last inspection date.  
B) Changes color when the ladder is exposed to sufficient heat, justifying the need for the ladder to be tested, before it can be used again.  
C) Shows manufacture date.  
D) Indicates what materials the ladder is constructed of.  

Answer --> B

935) Strips of metal attached to ground ladders at chafing points, in areas such as the tip, or other locations where the ladder comes in contact with the apparatus mounting brackets are called –

A) Protective plates.
B) Guides.
C) Footpads.
D) Protection plates.

Answer -->  D


936) Roof ladders differ from Single ladders in which of the following ways?

A) Roof ladders do not possess a fly.
B) Roof ladders are normally longer than Single ladders.
C) Roof ladders can support more weight than Single ladders.
D) Roof ladders have folding hooks that provide a means by which the ladder may be anchored to the peak of the roof.

Answer -->  D


937) What NFPA Standard contains the requirements for the design and manufacturer's testing of ground ladders?

A) NFPA 1931.
B) NFPA 1001.
C) NFPA 1901.
D) NFPA 1500.

Answer -->  A


938) The label affixed to the inside of each beam of each ladder section that changes color indicating that the ladder has been exposed to a high degree of heat is known as a –

A) High-heat marker.
B) High-heat stamp.
C) Heat-sensor label.
D) Heat-sensor sticker.

Answer -->  C

939) Heat sensor labels are preset to what temperature?

A) 200 degrees F.
B) 300 degrees F.
C) 350 degrees F.
D) 400 degrees F.

Answer --> B


940) Which ladder components would you not expect to see on extension ladders.

A) Fly.
B) Pawls.
C) Hooks.
D) Halyard.

Answer --> C


You would see hooks on roof ladders.

941) Which ladder can be used as an A-frame ladder?

A) Roof ladder.
B) Pompier ladder.
C) Combination ladder.
D) Single ladder.

Answer --> C


942) Which ladder would be considered a "Wall Ladder"?

A) Single ladder.
B) Extension ladder.
C) Pompier ladder.
D) Folding ladder.

Answer --> A


Also known as straight ladders.
943) Normally extension ladders range between __ feet in length.

A) 10 – 24.
B) 15 – 35.
C) 12 – 39.
D) 20 – 45.

Answer -->  C


944) Which of the NFPA standards serves as a guideline for the service testing of all ground ladders?

A) NFPA 1932.
B) NFPA 1931.
C) NFPA 1984.
D) NFPA 1905.

Answer -->  A


945) What are the most effective tools for cleaning ladders?

A) Power washers with industrial strength grease cutters
B) Wire brush and 10% nitric acid solution
C) Soft-bristle brush and running water
D) Soaking in a bath of Clorox and water for at least 30 minutes

Answer -->  C


946) According to NFPA 1932, how often should ladders be inspected?

(1) After each use  (2) Daily  (3) Weekly  (4) Monthly  (5) Yearly

A) 1
B) 1, 2.
C) 1, 5.
D) 1, 4.

Answer -->  D

947) Which statement regarding inspecting ladders is NOT true?

A) Firefighters should check heat sensor labels on metal and fiberglass ladders.
B) Rungs should be checked for snugness and tightness.
C) Welds should be inspected for any cracks or other defects.
D) Wooden ladder bolts should be tightened until the heads of the bolts are pulled into the wood.

Answer -->  D

Over tightening the bolts can crush the wood.

948) Firefighters should use __ to preserve wooden ladders.

A) Paint.
B) Shellac.
C) Varnish.
D) Polyurethane.

Answer -->  C


949) According to IFSTA, which of the following would be a proper definition of "Ladder Maintenance?"

A) Restore or replace that which has become inoperable.
B) Keeping ladders in a state of usefulness or readiness.
C) Adhering to a strict regiment of ladder inspections.
D) Being vigilant in periodic cleaning and proper storage of ladders.

Answer -->  B


950) Which statement regarding the maintenance of ground ladders is NOT true?

A) Ground ladders should be kept free from moisture.
B) Ladders should not be stored where they will be exposed to exhaust or engine heat.
C) Ladders should not be stored where they will be exposed to the elements.
D) Ladders should be periodically painted to prevent rust from forming.

Answer -->  D

Ladders should not be painted except for the top and bottom 18 inches of the beams for purposes of identification or visibility.
951) If the varnish of a wooden ladder shows any sign of darkening or blistering this may indicate that the ladder has been exposed to –

A) Excessive ultraviolet light.
B) Strong oxidizing agents.
C) Excessive heat.
D) The corrosive effects of protein foams.

Answer -->  C


952) One sign that a wooden ladder should be taken out of service and tested, is the appearance of dark streaks in the wood. What does this indicate?

A) Natural oxidation of photosensitive resins in the grain.
B) Evidence that the varnish is breaking down and should be reapplied.
C) Bacterial action on the wood (weathering).
D) Deterioration of the wood itself.

Answer -->  D


953) Which ladder would be used in attic scuttle holes, small rooms, or closets?

A) Single ladder.
B) Combination ladder.
C) Folding ladder.
D) Pompier ladder.

Answer -->  C


Also called attic ladders.

954) According to NFPA 1901 which ladder is not required to be carried aboard all pumper and engine companies?

A) 10 foot folding ladder.
B) 10 foot combination ladder.
C) 14 foot roof ladder.
D) 24 foot or larger extension ladder.

Answer -->  B

955) Ladders should be placed against building so they are at a safe angle to climb. The optimum ladder angle should be approximately –

A) 55 degrees.
B) 65 degrees.
C) 75 degrees.
D) 85 degrees.

Answer -->> C


To approximate this angle firefighters should do the following:

1) Stand on the first run of the ladder.
2) Stand erect.
3) Extend arms straight out.
4) The palms of the hands should touch the top of the rung at shoulder level.

956) What is the average distance of a ‘Commercial Story’?

A) 8 feet.
B) 10 feet.
C) 12 feet.
D) 14 feet.

Answer -->> C


957) When deploying firefighters to the roof of a building, the ladder should be extended __ beyond the roof edge.

A) 2 rungs.
B) 3 rungs.
C) 4 rungs.
D) 3 to 5 rungs.

Answer -->> D


958) In order to reach a third story window or roof, a ladder should be at least __ feet long.

A) 28
B) 35
C) 40
D) 45

Answer -->> C

959) In order to reach a second story window a ladder should be at least __ feet long.

A) 20
B) 25
C) 28
D) 30

Answer --> A


960) To reach a second story roof a firefighter should select a ladder which is at least __ feet long.

A) 20
B) 25
C) 28
D) 35

Answer --> C


961) When using a ladder to rescue persons from a window, the ladder should be placed –

A) With the tip of the ladder just below the windowsill.
B) With the tip of the ladder just above the windowsill.
C) Two to three rungs above the windowsill.
D) To the side of the window, extending two to three rungs above the windowsill.

Answer --> A


962) When using a ladder for access from the side of the window or for ventilation, the ladder should be placed against the building –

A) With the tip of the ladder just below the windowsill.
B) With the tip of the ladder just above the windowsill.
C) With the tip of the ladder even with the top of the window.
D) To the side of the window, extending two to three rungs above the windowsill.

Answer --> C


The ladder should be placed on the windward side of the window.
963) According to NFPA 1931, all of the following ladders are required to have a measured length equal to the designated length except –

A) Single ladders.
B) Roof ladders.
C) Folding ladders.
D) Extension ladders.

Answer -->  D


In the case of extension ladders, the maximum extended length may be as much as 6 inches less than the designated length.

964) Ladders are mounted on the __ side of the apparatus with the heel plates facing the __ of the apparatus.

A) Left, Front.
B) Right, Front.
C) Right, Rear.
D) Any of the above.

Answer -->  D


965) Assuming that a ladder has been set at the proper angle, what is the maximum working height for an extension ladder which has a designated length of 24 feet?

A) 22 feet.
B) 23 feet.
C) 24 feet.
D) 25 feet.

Answer -->  B


Ladders of 35 feet in length or less, reach is approximately 1 foot less than the designated length.

966) Which statement regarding fiberglass ladders is correct?

A) Fiberglass ladders resist chipping and cracking.
B) Fiberglass ladders are poor conductors of electricity when they are dry.
C) Fiberglass ladders tend to be lighter than other types.
D) Fiberglass ladders resist burning when exposed to flames.

Answer -->  B

967) A firefighter removing a ladder from the side of the apparatus, and carrying it using the low–shoulder method, should position himself with the beam of the ladder over his shoulder, and the __ facing –

A) Butt, downward.
B) Butt, upward.
C) Tip, downward.
D) Tip, upward.

Answer --> A


968) While preparing to lift a ladder off the ground utilizing the low–shoulder carry, the firefighter should __ facing the __ of the ladder before lifting.

A) Stand, butt.
B) Kneel, butt.
C) Stand, tip.
D) Kneel, tip.

Answer --> D


969) The Two–Firefighter Low–Shoulder Carry is most commonly used for all the following ladders except –

A) 14 foot extension ladder.
B) 24 foot extension ladder.
C) 28 foot extension ladder.
D) 35 foot extension ladder.

Answer --> A


970) In performing a Two–Firefighter Low–Shoulder Carry, which of the following best describes the hand positioning of the forward firefighter?

A) Both hands secured around the last rung.
B) One hand supporting the lower beam, and the free hand holding the last rung.
C) One hand supporting the second to last rung, and the free hand covers the upper butt spur.
D) One hand supporting the upper beam, and the free hand covers the lower butt spur.

Answer --> C


The images in the IFSTA text do not show the firefighters carrying the ladder in the fashion described here. We have no explanation for why Essentials describes one method and shows another.
971) Which ladder carry is typically used on extension ladders up to 35 feet?

A) One-Firefighter Low-Shoulder carry.
B) Two-Firefighter Arm's Length On-Edge carry.
C) One-Firefighter Arms’s Length On-Edge carry.
D) Three-Firefighter Flat-Shoulder carry.

Answer -->  D


972) Which of the following statements regarding procedures in carrying ground ladders is NOT true?

A) The method in carrying a ladder using the Four-Firefighter Flat-Shoulder carry is identical to that of the Three-Firefighter Flat-Shoulder carry, except that the firefighters are positioned at each end of the ladder, opposite to each other.
B) Roof ladders should always be carried with the hooks facing the rear.
C) If personnel are limited, the hooks of a roof ladder may be opened at the apparatus before the carry begins.
D) The hooks of a roof ladder should be opened before the firefighter ascends.

Answer -->  B


CodeRQ

Answer change from last version. IFSTA now says you can carry a roof ladder with either hooks in front or hooks in back. Previous answer indicated that hooks should always be carried in front.

973) Normally, an officer will make the determination as to where a ladder is to be positioned. However, firefighters carrying the ladder often decide the exact location as to where the butt of the ladder should be placed. In view of this, who would give the command as to where the butt of an extension ladder is to be placed using the Four-Firefighter Flat-Shoulder carry?

A) The firefighter on the left side of the butt of the ladder.
B) The firefighter on the right side of the butt of the ladder.
C) The firefighter on the left side of the tip of the ladder.
D) The firefighter on the right side of the tip of the ladder.

Answer -->  B

974) When lifting a ladder from the ground with a group of firefighters, which firefighter gives the command to lift?

A) The firefighter positioned at the butt.
B) The firefighter positioned in the middle.
C) The firefighter positioned at the rear.
D) The ranking firefighter gives the command.

Answer --> A


975) Where should a firefighter position a ladder at a window if it is to be used as a vantage point from which to break a window for ventilation?

A) On the windward side of the window with the tip of the ladder even with the top of the window.
B) On the leeward side of the window with the tip of the ladder even with the top of the window.
C) Directly in front of the window with the tip of the ladder on the wall directly above the window.
D) In front of the window with the tip of the ladder even with the window sill.

Answer --> A


976) Where should a firefighter position a ladder at a window, if it is to be used as a vantage point from which to direct a hose stream?

A) On the windward side of the window with the tip of the ladder even with the top of the window.
B) On the leeward side of the window with the tip of the ladder even with the top of the window.
C) Directly in front of the window with the tip of the ladder on the wall directly above the window.
D) In front of the window with the tip of the ladder even with the window sill.

Answer --> A


977) If 20 feet of a 25 foot ladder will be used, how far away from the building should the butt of the ladder be placed?

A) 2 feet.
B) 3 feet.
C) 4 feet.
D) 5 feet.

Answer --> D


Formula for ladder angle

\[ A = \frac{LU}{4} \]

\( A \) = Angle (ladder angle)
\( LU \) = Length Used
978) Which ladder will conduct electricity when wet?
A) Wooden ladders.
B) Metal ladders.
C) Fiberglass ladders.
D) All ladders will conduct electricity when wet.
Answer --> D


979) Which ladders must be placed on the ground prior to being raised?
A) Single ladders.
B) Combination ladders.
C) Extension ladders.
D) None of the above.
Answer --> D

CodeRQ
Answer change from last version. Old answer was Pole Ladders. This reference has been dropped in this edition.

980) According to IFSTA, all ladders should maintain a distance of at least __ from all energized electrical lines or equipment.
A) 10 feet.
B) 15 feet.
C) 20 feet.
D) 25 feet.
Answer --> A


981) Which statement regarding the position of the fly section while raising extension ladders is true?
A) Wooden extension ladders normally are designed so that the fly faces into the building while it is being raised.
B) Metal and fiberglass extension ladders normally are designed to be raised with the fly facing out away from the building.
C) Each ladder manufacture specifies which position the fly should be raised in. Firefighters should follow these recommendations.
D) All the above.
Answer --> D

982) The halyard should be tied off using a –

A) Bowline.
B) Clove hitch.
C) Square knot.
D) Sheet bend.

Answer --> B

Don’t forget the overhand safety knot.

983) Normally, ladders 35 feet or longer should be raised by at least __ firefighters.

A) 2
B) 3
C) 4
D) 5

Answer --> B


984) The firefighter positioned at the butt end of the ladder during a ladder raising is referred to as the –

A) Butt–man.
B) Heeler.
C) Anchor–man.
D) Spotter.

Answer --> B


985) All of the following statements regarding the raising of ladders is true except –

A) Single and roof ladders of 14 feet or less can usually be raised by a single firefighter.
B) It is preferred that a ladder is raised parallel to a building rather than perpendicular.
C) Buildings can be used to heel a ladder during a One–Firefighter Single Ladder Raise.
D) The firefighter at the butt end of the ladder, is responsible for positioning it at a desired distance from the building, and also determines if the ladder is to be raised parallel or perpendicular to the building.

Answer --> B


It makes little difference if a ladder is raised parallel or perpendicular to a building.
986) Which of the following represents the two basic ways for two firefighters to raise a ladder?

(1) Angle raise (2) Flat raise (3) Halyard raised (4) Beam raise

A) 1, 2.
B) 2, 3.
C) 3, 4.
D) 2, 4.

Answer -->  D


987) When raising a large ladder with 4 firefighters, firefighters normally will raise the ladder using which of the following ladder raises?

A) Flat raise.
B) Angle raise.
C) Beam raise.
D) Halyard raise.

Answer -->  A


CodeRQ

988) When properly heeling a ladder from behind the ladder, firefighters should do all of the following except –

A) The firefighter must securely grasp the beams of the ladder and not the rungs.
B) The firefighter must wear head and eye protection.
C) The firefighter stands behind the ladder and pulls the ladder towards the building.
D) The firefighter must constantly look up and monitor other firefighters who may be ascending or descending the ladder.

Answer -->  D


989) What is the average distance of a 'Residential Story'?

A) 8 feet.
B) 10 feet.
C) 12 feet.
D) 13 feet.

Answer -->  B

990) When ascending a ladder the firefighter should do all of the following except –

A) Climb with his/her leg muscles instead of arm muscles.
B) Keep eyes straight forward occasionally glancing at the tip of the ladder.
C) The firefighter’s arms and hands should reach upward during the climb.
D) The hands should grasp the rungs palm down and the thumb place beneath the rung.

Answer -->  C


Your arms and hands should not reach above your head while climbing the ladder, because that action will bring your body too close to the ladder. Keep your arms straight during your climb.

991) To safely work on a ladder, firefighters should secure themselves to the ladder using which of the following?

(1) Leg Lock  (2) Ladder Belt(Class I Safety Harness)  (3) Class II Safety Harness  (4) Class III Safety Harness

A) 1
B) 1, or 2.
C) 3, or 4.
D) 4

Answer -->  B


Class I Safety Harness is a ladder belt.

992) All safety harnesses used by firefighters must meet the requirements set forth in –

A) NFPA 1901.
B) NFPA 1932.
C) NFPA 1931.
D) NFPA 1983.

Answer -->  D


993) How many firefighters is required in order to bring a victim safely down a ladder?

A) 1
B) 2
C) 3
D) 4

Answer -->  D


Two inside the building, 1 on the ladder, and 1 heeling the ladder.
994) Which methods can be used to bring an unconscious victim down a ladder?

A) Victim faces towards the firefighter, and is supported by the firefighter's knee. The victim's feet are placed outside the rails to prevent them from becoming entangled in the rungs.
B) Victim faces away from firefighter, and is supported by the firefighter's knee. The victim's feet are placed outside the rails to prevent them from becoming entangled in the rungs.
C) The firefighter supports the victim with one arm at the crotch and the other supporting the chest.
D) All the above can be used to safely bring an unconscious victim down a ladder.

Answer -->  D


995) Small children should be brought down ladders using which of the following methods?

A) Cradled in the firefighter's arms.
B) Cradled between the firefighter and the ladder.
C) Over the firefighter's shoulders.
D) All of the above can be used to bring a small child down a ladder.

Answer -->  A


996) How often should ground ladders be cleaned?

A) Once a week.
B) Once a month.
C) Annually.
D) After each use.

Answer -->  D


997) Firefighters should utilize a leg lock to secure themselves to a ladder on all but which of the following types of ladder?

A) Single ladder.
B) Extension ground ladder.
C) Pole ladder.
D) Aerial ladder.

Answer -->  D


Extension or retraction of the aerial ladder could result in serious injury to the locked-in firefighter.
998) Metal rods of a wooden ladder extending from one beam to the other are called –

A) Tie rods.
B) Rung rods.
C) Stretchers.
D) Supports.

Answer -->  A


999) Spacers set between the rails of a trussed ladder, that are sometimes used to support rungs are called –

A) Rung blocks.
B) Rail blocks.
C) Truss blocks.
D) Ladder blocks.

Answer -->  C


1000) The two lengthwise members of a trussed ladder beam that are separated by truss or separate blocks are called –

A) Blocks.
B) Rails.
C) Beams.
D) Truss beams.

Answer -->  B


1001) Wooden or metal pieces that prevent the fly of a ladder section from being extended too far are called –

A) Limiters.
B) Stops.
C) Blocks.
D) Tip blocks.

Answer -->  B

1002) Which ladder will retain its strength when exposed to heat or flame?

A) Metal.
B) Fiberglass.
C) Wood.
D) None of the above.

Answer --> C


Metal ladders can suddenly fail when exposed to heat or flame. Fiberglass ladders can burn when exposed to flame. Wooden ladders retain their strength when exposed to heat or flame.

1003) To restore or put together that which has become inoperable or out of place best describes –

A) Maintenance.
B) Preventative maintenance.
C) Recover.
D) Repair.

Answer --> D


1004) What action should you take if you discover that a heat sensor label on a ladder has changed color?

A) Schedule a ladder test.
B) Perform a visual examination of the ladder for possible heat damage.
C) Remove the old sticker and replace it with a new one.
D) Take the ladder out of service until a ladder test is performed.

Answer --> D


1005) NFPA 1901 specifies that aerial ladders should carry all but which of the following?

A) One straight ladder.
B) Two roof ladders equipped with hooks.
C) One folding ladder.
D) Two extension ladders.

Answer --> A


Aerial apparatus must carry a minimum of 115 feet of ground ladders.
1006) For ladders over 35 feet, the reach is approximately __ less than the designated height.

A) 1 foot.
B) 16 inches.
C) 2 feet.
D) 30 inches.

Answer --> C


1007) When two or more firefighters are lifting a ladder off apparatus, who gives the command to lift.

A) The firefighter at the tip.
B) The firefighter at the butt.
C) The company officer.
D) The firefighter who can see the other members of the team.

Answer --> D


CodeRQ

Answer change from last version. In the 5th edition, the firefighter at the butt of the ladder would be the one to give the command to lift.

1008) A piece of rope spliced to form a loop through the eye of a metal hook, that is used to secure a hoseline to ladders or other objects is called a –

A) Hose tool.
B) Ladder tool.
C) Ladder hose tool.
D) Rope hose tool.

Answer --> D


1009) How many firefighters can safely stand on a 4 section extension ladder at one time.

A) 2
B) 4
C) 5
D) 6

Answer --> B


One firefighter for each section.
1010) Properly performed, ventilation operations accomplishes all of the following except –

A) Channels toxic gases and heated air away from trapped occupants.
B) Decreases the chances of flashover or backdraft.
C) Decreases fire flair up.
D) Allows cool air into the building, which facilitates entry by firefighters, and facilitates rescue efforts to find unconscious victims.

Answer --> C


When air enters the building the fire will increase in intensity.

1011) The plan, systematic, and coordinated removal of heated air, smoke, gases or other airborne contaminants from a structure, replacing them with cooler fresh air, to meet incident priorities of life safety, incident stabilization and property conservation is known as –

A) Ventilation.
B) Negative pressure ventilation.
C) Positive pressure ventilation.
D) Tactical ventilation.

Answer --> D


1012) When should tactical ventilation be performed?

A) Immediately upon arrival at the scene.
B) Only after the seat of the fire has been located.
C) Only after fire attack hoselines in teams are in place and ready to advance towards the fire.
D) All of the above.

Answer --> C


1013) Successful tactical ventilation depends on which of the following?

A) Careful planning and the knowledge of building construction.
B) Knowledge of fire behavior.
C) Systematic application of procedures for removing the contaminants from a building, and the coordination with other fireground activities.
D) All the above.

Answer --> D

1014) Proper ventilation reduces the chances of flashover by removing __ from the structure.

A) Heat.
B) Smoke.
C) Toxic gases.
D) Water vapor.

Answer --> A


1015) All of the following are signs of potential backdraft except –

A) Pressurized smoke appearing from small cracks.
B) Puffing of smoke at intervals from the building.
C) Visible flame inside the structure.
D) Smoke-stained windows.

Answer --> C


During a backdraft situation there will be very little if any visible flame from the exterior of the structure. It is imperative that firefighters constantly look for signs of backdraft before ventilating or entering a building.

1016) If the possibility of backdraft exists firefighters should –

A) Open the entrance door slowly, and stay low while entering the burning structure.
B) Ventilate all lower windows before attempting to enter the structure.
C) Ventilate all upper windows before attempting to enter the structure.
D) Vertically ventilate at the highest point before attempting to enter the structure.

Answer --> D


1017) Who makes the ultimate decision on whether to ventilate a structure?

A) The first arriving truck company.
B) The incident commander.
C) The first arriving engine company.
D) The first arriving fire officer.

Answer --> B

1018) What color would you expect the smoke to be that may indicate the potential of a backdraft situation?

A) Blue-White.  
B) Gray-Yellow.  
C) Black.  
D) Brown.  

Answer --> B  

Notes) Page 737, Reference missing from this chapter in Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. Knightlite kept question in because we thought it was important.

1019) You arrive at the scene of a two story wood frame house on fire. You conjecture that the fire is in its early stages by the presence of __ smoke bellowing from the structure.

A) Gray–White.  
B) Gray-Yellow.  
C) Black.  
D) Brown.  

Answer --> A  


1020) In high-rise buildings fire and smoke may spread rapidly via stairways, elevator shafts, pipe shafts, air-handling systems, and any other vertical openings. This causes an upward draft known as the –

A) Stack effect.  
B) High-rise effect.  
C) Updraft effect.  
D) Convection effect.  

Answer --> A  


1021) Smoke and other fire gases will travel through a high building until –

A) Their temperatures come to equilibrium with ambient air.  
B) Their temperatures fall below that of ambient air.  
C) Until mushrooming occurs.  
D) None of the above.  

Answer --> A  

1022) In a high-rise building, before doors leading to the involved fire floors are opened, the door to the roof must –

A) Be blocked open.
B) Be removed.
C) Be tied close.
D) A and B.

Answer -->  D


1023) A fire breaks out on the second floor of an eight story high-rise building. Hot fire gases have traveled through the stairwell and gas temperatures reach equilibrium with ambient air on the 6th floor. On which floor would you expect to find the maximum amount of smoke?

A) 1st floor.
B) 2nd floor.
C) 6th floor.
D) 8th floor.

Answer -->  C


Since the temperature of the smoke reached equilibrium on the 6th floor it will stop rising on that floor, so the majority of the accumulated smoke will be on the 6th floor.

1024) Which statement is NOT true?

A) Ventilation of a building should be performed as soon as possible, regardless whether or not the seat of the fire has been located.
B) Ventilation should be performed only after the seat of the fire has been located.
C) Basement fires are some of the most challenging fires for firefighters, because they are forced to descend through the worst heat and smoke to reach the seat of the fire.
D) Windowless buildings create an adverse effect on firefighters and ventilation operations.

Answer -->  A


Ventilating a building in a location other than over the seat of the fire will cause the fire to spread to uninvolved areas.
All Chapters

1025) What causes heat, smoke, and fire gases to travel upward to the highest point in an area, until they are trapped by a roof or a ceiling?

A) Conduction.
B) Convection.
C) Radiation.
D) Diffusion.

Answer --> B


1026) Firefighter Jean says that in windowless buildings, mechanical ventilation equipment can sometimes be effective in clearing an area of smoke. Firefighter Dennis says that in windowless buildings, mechanical ventilation equipment can cause the spread of heat and fire. Who is correct?

A) Firefighter Jean.
B) Firefighter Dennis.
C) Both are correct.
D) Both are incorrect.

Answer --> C


1027) Incident stabilization means controlling and extinguishing a fire in a progression of stages. In order to accomplish this, what would you consider to be the first stage?

A) Locating the fire.
B) Confining the fire to the room, area, or structure of origin.
C) Extinguishing the fire.
D) Ventilating the fire floor.

Answer --> A


1028) All of the following are factors having a bearing on where firefighters should ventilate a building except –

A) The type of building construction.
B) Wind direction.
C) Ambient air temperature.
D) Effect that ventilation will have on exposures.

Answer --> C

1029) When firefighters commence ventilation operations they should expect the fire to –

A) Decrease in intensity.
B) Increase in intensity.
C) Change little from prior ventilation procedures.
D) Produce more smoke.

Answer -->  B


1030) Top ventilation in high-rise buildings must be considered –

A) During scene size-up.
B) Upon arrival of the first ladder company.
C) Upon arrival of the first apparatus.
D) During pre-incident planning.

Answer -->  D


1031) When working on a roof for ventilation purposes, how many means of escape should be in place to help insure firefighter safety?

A) 1.
B) 2.
C) 3.
D) 4.

Answer -->  B


1032) Which would be good indicators that an unsafe roof condition exists?

(1) Melting Asphalt  (2) "Spongy Roof"  (3) Smoke Coming From Roof  (4) Fire Coming From Roof

A) (1) and (2).
B) (2) and (4).
C) (2) and (4).
D) All the above.

Answer -->  D

1033) All of the following statements regarding ventilation are true except –

A) It is better to make several small ventilation holes rather than one large hole.
B) Always cut ventilation holes with the wind at your back.
C) Always cut roof material diagonally, along side the joists.
D) The last step in roof ventilation is to open up the ceiling below the ventilation hole, with a pike pole or plaster hook.

Answer --> A


1034) The best tool for opening up a slate or tile roof is a –

A) Rotary rescue saw.
B) Axe.
C) Sledgehammer.
D) Carbide-tipped chain saw.

Answer --> C


1035) Trench ventilation cuts –

A) Should extend from one exterior wall to the midpoint or peak of the roof.
B) Should extend the entire width of the roof.
C) Should never be used in low expansive structures such as schools, motels or shopping malls.
D) Should be cut well in back of the advancing fire.

Answer --> B


Trench ventilation should be strictly used as a defensive operation and should not be confused with or used as offensive vertical ventilation.

1036) When performing a trench cut in a roof, the hole or trench should be at least –

A) 1 foot wide.
B) 2 feet wide.
C) 3 to 4 feet wide.
D) More than 4 feet wide.

Answer --> C


CodeRQ

Answer change from last version. Old answer was at least 4 feet wide.
1037) Vertical ventilation can be undertaken after the fire officer has completed all of the following except –

A) Considered the age and type of building involved.
B) Identified escape routes.
C) Considered the location, duration, an extent of the fire.
D) All assigned engine companies have arrived at the scene.

Answer --> D


1038) In regard to ventilation safety, which of the following statements is not true?

A) When making a ventilation cut on a rooftop, make sure the angle of the cut is directed toward your body.
B) Beware of overhead obstructions when working with an axe.
C) Check the roof for structural integrity before stepping upon it.
D) Make sure that a roof ladder is secured over the peak of the roof before using it.

Answer --> A


Make sure the angle of the cut is away from your body.

1039) Why is pre-incident planning and surveys necessary as it pertains to ventilation procedures?

A) Pre-incident planning helps to determine where ventilation holes will be placed.
B) Pre-incident planning helps to identify buildings that have roofs supported by lightweight or wooden trusts, which may fail early in a fire.
C) Pre-incident planning helps to identify the locations of potential water sources.
D) Pre-incident planning helps to identify fire department resources that may be needed in the event of a fire.

Answer --> B


1040) Why should existing roof openings be used whenever possible to ventilate a structure, rather than cutting a hole in the roof?

A) Existing roof openings are generally larger than holes cut by firefighters.
B) Existing roof openings are typically located directly over the fire.
C) Existing roof openings are generally faster to open rather than cutting a hole in the roof.
D) Existing roof openings typically create a greater draft then openings cut by firefighters.

Answer --> C

1041) Why should firefighters make an effort to cut rectangular or square openings?

A) They are easier to cut.
B) They provide a better draft.
C) They help to facilitate repairs to the roof.
D) All the above.

Answer --> D


1042) When cutting a large ventilation hole in a roof, the opening should be at least –

A) 2 x 2 feet.
B) 3 x 3 feet.
C) 4 x 4 feet.
D) 4 x 8 feet.

Answer --> D


CodeRQ

Answer change from last version. Old answer was 4 x 4 feet.

1043) Which of the following provides a means by which ventilation procedures may be accelerated?

A) Rotary saws.
B) Carbide-tipped chain saws.
C) Chain saw with adapted features.
D) All the above.

Answer --> D


CodeRQ

1044) Which roof cut utilized during ventilation operations, consists of a small cut, normally the width of the cutting blade, that is used to determine the direction of fire spread?

A) Kerf cut.
B) Inspection cut.
C) Louvered cut.
D) Trench cut.

Answer --> A

1045) Pertaining to ventilation, which of the following consists of three cuts that form a small triangle?

A) Kerf cut.
B) Inspection hole.
C) Louvered cut.
D) Trench cut.

Answer --> B


1046) ___ are made in between the rafters rather than beside them, causing the panels to be hinged on the rafters.

A) Kerf cuts.
B) Inspection cuts.
C) Louvered cuts.
D) Trench cuts.

Answer --> C


1047) ___ roofs are most commonly found on commercial, industrial, and apartment buildings.

A) Flat.
B) Pitched.
C) Arched.
D) Sloped.

Answer --> A


1048) On which type of roof would you expect to find a bowstring truss?

A) Flat roofs.
B) Pitched roofs.
C) Arched roofs.
D) Gambrel roofs.

Answer --> C

1049) How should metal roofs be opened?

A) They should be pried up from the edges.
B) They should be cut at the rafters using a ventilation saw.
C) They should be sliced open with an axe or rotary saw and peeled back.
D) They should be cut at the rafters using a sharp axe.

Answer --> C


1050) Why can some arched roofs be difficult to ventilate?

A) The lower chord of the truss may be covered with a ceiling to form an enclosed roof space.
B) They are difficult to stand on.
C) Lacking a sharp peak, it is difficult to secure a roof ladder upon it.
D) They are practically impenetrable to common ventilation tools.

Answer --> A


Reference in this edition is incomplete. From a safety standpoint B and C could have been the correct answer, but from a ventilation standpoint, the correct answer should be A.

1051) The space between an arched roof and the ceiling is sometimes called the –

A) Winter porch.
B) Cockloft.
C) Truss area.
D) Tie.

Answer --> B


Again, reference missing from this edition, but should be included here.

1052) When attempting to ventilate an arched roof, firefighters should work –

A) On the edges of the roof.
B) In the center of the roof.
C) From a well-secured roof ladder.
D) Only on the trusses themselves or other strong points when possible

Answer --> D


CodeRQ

When walking on truss roofs you should stay right on the trusses themselves and avoid areas between the trusses.
1053) What is the chief purpose of trench ventilation?

A) To increase visibility.
B) To remove heated smoke and gases.
C) To stop the spread of fire in a long, narrow structure.
D) To aid in the recovery of trapped victims.

Answer -->  C


1054) Firefighter Suzi says that trench ventilation holes should be cut right over the fire. Firefighter Liza says that trench ventilation holes should be cut well ahead of the advancing fire. Who is correct?

A) Firefighter Suzi.
B) Firefighter Liza.
C) Both are correct.
D) Both are incorrect.

Answer -->  B


1055) Trench ventilation is sometimes called –

A) Vertical ventilation.
B) Horizontal ventilation.
C) Radical ventilation.
D) Strip ventilation.

Answer -->  D


1056) Firefighters should cut trench cuts at least ___ ahead of the advancing fire and only after offensive vertical ventilation openings have been made.

A) 15 feet.
B) 20 feet.
C) 25 feet.
D) 30 feet.

Answer -->  D

1057) In a building with balloon construction, typically where is the first area of fire extension most commonly found from a fire originating in the basement?

A) The first floor.
B) The second floor.
C) The attic.
D) All of the above.

Answer --> C


1058) In a basement fire, to reduce the likelihood of vertical extension, what is a firefighter’s last resort in ventilating the structure?

A) Venting through ground height basement windows.
B) Venting through wells and other subterranean windows.
C) Cutting a hole in the floor near ground level windows or doors and venting from the first floor.
D) Venting at the highest point in the structure.

Answer --> C


1059) Which location would you consider your first choice for ventilating a basement fire?

A) The basement windows.
B) The attic windows.
C) Natural paths such as stairwells.
D) The windows directly over the basement.

Answer --> A


1060) If an attack crew is working inside a building, when can hoselines be directed downward through ventilation holes?

A) If there is no fire emerging from the ventilation hole.
B) When the attack crew radios the incident commander that the fire has been knocked down.
C) When ordered to do so by any fire officer.
D) You should never, ever discharge hoselines through ventilation holes while an attack team is working inside a building.

Answer --> D


Never, ever, never, ever!
1061) Fire streams directed above ventilation holes, which help to cool the thermal column and lessen sparks and flying brands, from a burning building are called –

A) Ventilation streams.  
B) Water curtains.  
C) Elevated streams.  
D) Hydraulic ventilation.

Answer --> C


1062) Ventilating smoke and other fire gases through openings such as windows and doors is known as –

A) Vertical ventilation.  
B) Horizontal ventilation.  
C) Residential ventilation.  
D) Forced ventilation.

Answer --> B


1063) What do the following statements all have in common? 1) Excessive breakage of glass. 2) Breakage of skylights. 3) Explosions. 4) Additional openings between the attack team and the upper opening. 5) Improper use of mechanical ventilation 6) Burn-through of the roof, a floor or a wall.

A) They all will assist in the effectiveness of vertical ventilation.  
B) They all will assist in the effectiveness of horizontal ventilation.  
C) They can all destroy the effectiveness of vertical ventilation.  
D) They can all destroy the effectiveness of horizontal ventilation.

Answer --> C


CodeRQ

1064) All of the following would be situations where firefighters would use horizontal ventilation except –

A) Residential structures in which the fire has not yet involved the attic area.  
B) The involved floors of multistory structures below the top floor.  
C) Fires involving one–story structures.  
D) Buildings with daylight basements.

Answer --> C


Also included is – Buildings so weaken by fire that vertical ventilation is unsafe. And – Buildings in which vertical ventilation is ineffective (cold smoke fire.)
1065) All of the following would be considered ways by which horizontal extension occurs except –

A) Through stairwells and elevator shafts.
B) Through wall openings by direct flame contact or by convection.
C) Through open space by radiation or convected air currents.
D) Through walls by conduction of heat from beams, or pipes.

Answer --> A


Fire spread through stairways and elevator shafts would be considered vertical ventilation.

1066) You are standing in a burning bedroom facing north. The wind is blowing from west to east. You open all the windows on the east and west sides of the bedroom for ventilation. The windows on the west side of the bedroom would be considered on the ___ of the fire.

A) Leeward side.
B) Downwind side.
C) Windward side.
D) Right side.

Answer --> C


1067) Firefighter George says that opening a door or window on the windward side of a structure prior to first creating an opening on the leeward side of the structure, may pressurize the building and cause the fire to spread to uninvolved areas. Firefighter Fred says opening doors and windows between the advancing fire fighting crews, and the established ventilation exit point, reduces intake of fresh air from the opening behind the firefighters.

A) Firefighter George is correct.
B) Firefighter Fred is correct.
C) Both are correct.
D) Both are incorrect.

Answer --> C


1068) Ventilation when accomplished mechanically or hydraulically is called –

A) Vertical ventilation.
B) Horizontal ventilation.
C) Pressurized ventilation.
D) Mechanical ventilation.

Answer --> D


Answer change from last version. Old answer was Forced Ventilation.
1069) Which would NOT be an advantage of forced ventilation?

A) May cause the fire to intensify.
B) Supplements natural ventilation.
C) Speeds up the removal of contaminants, and assists in creating a safer environment for rescue efforts.
D) Promotes good public relations.

Answer --> A


1070) An example of __ is when a smoke ejector is placed in a window so that the smoke and other gases are discharged to the outside of a building.

A) Negative-pressure ventilation.
B) Positive-pressure ventilation.
C) Vertical-pressure ventilation.
D) Horizontal-pressure ventilation.

Answer --> A


1071) An extinguished fire in a 6 room ranch has created evenly distributed smoke conditions throughout the structure. The wind is blowing strong out of the west at 25 miles per hour. In which window would you place a smoke ejecting fan in?

A) In the window on the North side of the structure blowing out.
B) In the window on the East side of the structure blowing out.
C) In the window on the West side of the structure blowing out.
D) In the window on the South side of the structure blowing out.

Answer --> B


1072) What will correct the effect of churning around an exhaust fan hanging in a doorway?

A) Placing two fans in the same doorway both facing out.
B) Placing two fans in the same doorway both facing in.
C) Placing two fans in a doorway, one facing in, the other facing out.
D) Covering the area around the fan with a salvage tarp.

Answer --> D

1073) To speed up the process of positive-pressure ventilation firefighters should do which of the following?

A) Provide additional exit openings to allow the smoke to ventilate faster.
B) Decrease the size of the exit opening so that ejection pressure will increase.
C) Reduce the size of the area being ventilated by systematically opening and closing doors.
D) Open second floor windows and doors to initiate natural convection air flows.

Answer --> C


1074) When positive pressure ventilation is being utilized to remove smoke from multiple floors of a building, where should the point of entry be placed?

A) At the highest point of the structure.
B) At the lowest point of the structure.
C) At the fire level.
D) At the level just below the fire level.

Answer --> B


1075) Using a charged hoseline to ventilate smoke and other fire gases from a burning building is known as __ ventilation.

A) Positive-Pressure.
B) Negative-Pressure.
C) Hydraulic.
D) Horizontal.

Answer --> C


1076) When utilizing hydraulic ventilation, the firefighter should position the nozzle so that it is at least __ from the opening of a window or door.

A) 6 inches.
B) 1 foot.
C) 1 1/2 feet.
D) 2 feet.

Answer --> D


The larger the opening, the faster ventilation will occur.
1077) You are called to the scene of an office building on fire. The building has a complicated HVAC system in place. In order to control ventilation of the structure you should do which of the following?

A) Operate the system to try to close ducts down which may cause the fire to spread.
B) Call for a complete schematics of the buildings HVAC system.
C) Call a building engineer to the scene.
D) Ignore the HVAC system an use standard ventilation procedures.

Answer --> C


1078) You are on the interior attack hoseline for a fire in a second story bedroom. You have found the seat of the fire and have performed the initial knock down. What should you do next.

A) Back the hoseline out of the building and wait for a secondary attack crew.
B) Commence salvage and overhaul operations.
C) Look for extension.
D) Attempt to clear the room of smoke, heat, steam, and gases via hydraulic ventilation.

Answer --> D


1079) When performing a hydraulic ventilation operation, what percentage of the fog pattern should cover the window or door opening?

A) 75% – 80%.
B) 80% – 85%.
C) 85% – 90%.
D) 90% – 95%.

Answer --> C


1080) __ is the transition between the growth state of a fire and the fully-involved state.

A) Rollover.
B) Mushrooming.
C) Flashover.
D) Backdraft.

Answer --> C


Just a review question.
1081) Ventilation should only occur –

A) After hoseline crews are ready to move in and attack the fire.
B) Only if the fire is in the free-burning stage.
C) Only if there is a danger of flashover.
D) Only if there is a danger of backdraft.

Answer --> A


1082) Techniques that use the wind, convection currents, and other natural phenomena to ventilate a structure without the use of fans, blowers and other mechanical devices is called –

A) Forced ventilation.
B) Natural ventilation.
C) Passive ventilation.
D) Basic ventilation.

Answer --> B


1083) Any means of ventilation other than that of natural forces, which may involve the use of fans, blowers, smoke ejectors, and fire streams is called –

A) Basic ventilation.
B) Active ventilation.
C) Positive pressure ventilation.
D) Mechanical ventilation.

Answer --> D


CodeRQ

Answer change from last version. Old answer was Forced Ventilation.

1084) Which may be one of the most important properties of smoke?

A) During the incipient stage of the fire, smoke is white in color.
B) Smoke is the product of incomplete combustion.
C) The burning process many times exceeds the ventilation process, thus producing large amounts of smoke.
D) Smoke is fuel that has not ignited.

Answer --> D


No direct reference in this chapter but important to know. All the other statements are true, but firefighters should not look at smoke as a product of combustion, but rather as a potential fuel that threatens life safety. It is important to vent this potential fuel off as soon as possible.
1085) Why are basement fires among the most challenging situations firefighters will face?

A) Basements without proper access mean that firefighters must descend through some of the worse heat and smoke in order to reach the seat of the fire.
B) Basements are not well lighted, making visibility difficult.
C) Basements are not easily vented.
D) Basements have limited paths of egress.

Answer --> A


1086) Ventilating a structure from the highest point of the building through existing or created openings and channeling the contaminated atmosphere vertically within the structure and out the top is called –

A) Channeling ventilation.
B) Vertical ventilation.
C) Horizontal ventilation.
D) Rooftop ventilation.

Answer --> B


1087) The leeward side is the –

A) Protected side.
B) Direction opposite the way the wind is blowing.
C) Downwind.
D) All the above.

Answer --> D


The windward side is the side or direction from which the wind is blowing.

1088) The movement of smoke from smoke ejectors out of a building and then being immediately drawn back into the building by negative pressure is an example of –

A) Recirculation.
B) Back-pressure.
C) Negative ventilation.
D) All the above.

Answer --> A


CodeRQ

Answer change from last version. The only answer was Churning. Recirculation can be prevented by sealing the open area around the smoke ejector with a tarp.
1089) The location where positive pressure ventilation is set up is called the –

A) In-point.
B) Windward point.
C) Entry point.
D) Origin.

Answer --> C


Also called the entry opening or inlet opening.

1090) During positive pressure ventilation, the blower fan should be positioned __ from the entry point.

A) 2 to 4 feet.
B) 4 to 6 feet.
C) 6 to 12 feet.
D) 10 to 20 feet.

Answer --> B


CodeRQ

Answer change from last version. Old answer was 4 to 10 feet.

1091) In a positive pressure ventilation operation, the exit point should be __ than the entry opening.

A) Slightly smaller.
B) The same size.
C) Larger.
D) Varies with the size of the entry opening and the capacity of the blower used.

Answer --> D


CodeRQ

Answer change from last version. This version has no definitive answer. Old answer was slightly smaller or the same size as the entry point.
1092) When considering the ventilation of a burning structure, which of the following should you consider first?

A) Decide if there is a need to ventilate at this time.
B) Where is ventilation needed.
C) The safety of the occupants and your firefighters.
D) What type of ventilation should be used.

Answer --> C


1093) The responsibilities of the leader of the roof team when ventilating a structure, should include all of the following except –

A) Making sure that only the required ventilation openings are made.
B) Directing the attack hoselines involved with fire suppression inside the building.
C) Directing efforts to minimize secondary damage caused by firefighters ventilating.
D) Ensuring the safety of all personnel who are working on the roof.

Answer --> B


1094) In North America, the footprint of a single–family residential structure has increased over ____ between the years 1973 and 2008.

A) 50%.
B) 75%.
C) 100%.
D) 150%.

Answer --> D


1095) In North America, the size of a building lot for a single–family residential structure has decreased ____ between the years 1973 and 2008.

A) 25%
B) 40%
C) 65%
D) 80%

Answer --> A

All Chapters

1096) During a fire, the knowledge of the building involved can be a great asset when decisions concerning tactical ventilation are made. This information can normally be obtained from –

A) Preincident plans.
B) Inspection reports.
C) Observation of similar structures.
D) All the above.

Answer -->  D


1097) The movement of air toward burning fuel and the movement of smoke out of a compartment or structure is known as –

A) Convection.
B) Air flow.
C) Conduction.
D) Radiation.

Answer -->  B


1098) Firefighter Jim says that airflow is caused by pressure differentials inside and outside the compartment. Firefighter John says that air flow is caused by differences in density between the hot smoke in the cooler air. Who is correct?

A) Firefighter Jim.
B) Firefighter John.
C) Both are correct.
D) Neither are correct.

Answer -->  C


1099) Which of the following resources must be in place before tactical ventilation begins?

A) Fire attack crews with a charged hoseline.
B) Search and rescue teams.
C) Exposure protection.
D) All the above.

Answer -->  D

1100) Whenever a building is opened the surrounding atmosphere can affect what is happening inside. Which of the following has the most weather-related influence on tactical ventilation?

A) Relative humidity.
B) Temperature.
C) Atmospheric pressure.
D) Wind.

Answer --> D


1101) Which of the following our devices intended to be used by firefighters to push fresh air into a structure and by nature are not intrinsically safe?

A) Blowers.
B) Smoke ejectors.
C) Skylight fans.
D) Smoke scrubbers.

Answer --> A


In contrast, smoke ejectors have intrinsically safe motors that are placed in smoke-filled atmospheres to push smoke out.

1102) The amount of water needed for fire protection in small towns is __ than the amount of water needed for industrial and domestic use.

A) Greater.
B) Less than.
C) Equal.
D) Slightly less than.

Answer --> A


1103) Which of the following would be considered an example of groundwater supply?

A) Springs.
B) Lakes.
C) Ponds.
D) Rivers.

Answer --> A


All the rest would be considered surface water supplies.
1104) Which of the following would not be considered one of the three methods of moving water in a system?
A) Vacuum pumping system.
B) Gravity system.
C) Direct pumping system.
D) Combination system.
Answer --> A

1105) Which method of moving water uses a primary water source located at a higher elevation than the distribution system?
A) Vacuum pumping system.
B) Gravity system.
C) Direct pumping system.
D) Combination system.
Answer --> B

1106) Which water pumping system uses one or more pumps to take water from a primary source, and discharge it through a filtration and treatment process?
A) Vacuum pumping system.
B) Gravity system.
C) Direct pumping system.
D) Combination system.
Answer --> C

1107) Most communities will use which of the following methods for moving water from a primary water source to a distribution system?
A) Vacuum pumping system.
B) Gravity system.
C) Direct pumping system.
D) Combination system.
Answer --> D
1108) What is a fire department's main concern regarding water treatment facilities?

A) The amount of water that is held by the primary water source.
B) The general water quality including levels of contaminants and bacteria contained in the treated water.
C) The fear that a maintenance error, natural disaster, loss of power supply, or fire could disable the pumping stations or severely hamper the purification process.
D) The rate of water flow between the primary source and the distribution system.

Answer --> C


1109) A fire hydrant that receives water in only one direction is called a –

A) Circulating–feed hydrant.
B) Dead–end hydrant.
C) Uni–flow hydrant.
D) Grid–end hydrant.

Answer --> B


1110) A fire hydrant that receives water in more than one direction is called a(an) –

A) Circulating–feed hydrant.
B) Dead–end hydrant.
C) Di–flow hydrant.
D) Grid–end hydrant.

Answer --> A


Also called a looped system.

1111) Large pipes, with relatively widespread spacing, that convey large quantities of water to many locations of a system, that are locally distributed to smaller mains are called –

A) Primary feeders.
B) Secondary feeders.
C) Tertiary feeders.
D) Distributors.

Answer --> A

CodeRQ

Also called arterial mains.
1112) A grid arrangement of smaller water mains that serve individual fire hydrants and blocks of consumers are called?

A) Primary feeders.
B) Secondary feeders.
C) Hydrant feeders.
D) Distributors.

Answer -->  D


1113) To insure a sufficient water supply to a community, how many primary feeders should run from the source of supply to high-risk industrial districts of the community?

A) One or more.
B) Two or more.
C) Three or more.
D) Four or more.

Answer -->  B


1114) Fire hydrant supply mains in residential areas should be at least __ in diameter.

A) 4 inches.
B) 6 inches.
C) 8 inches.
D) 10 inches.

Answer -->  B


These small water mains are usually 6 to 8 inches in diameter and serve fire hydrants and commercial and residential consumers.

1115) Fire hydrant supply mains in business and industrial areas should be at least __ in diameter.

A) 4 inches.
B) 6 inches.
C) 8 inches.
D) 10 inches.

Answer -->  C

1116) Isolation valves should be operated ___ to keep them in good working order.

A) Every six months.
B) At least once a year.
C) Every two years.
D) Every three years.

Answer --> B


1117) In general, fire hydrants should not be spaced more than apart ___ in high-value districts.

A) 300 feet.
B) 500 feet.
C) 600 feet.
D) 1000 feet.

Answer --> A


Answer change from last version. Old answer was 600 feet.

1118) An indicating-type water valve –

A) Visually shows whether or not a gate or valve seat is open, closed or partially opened.
B) Is threaded so it opens clockwise.
C) Is normally buried.
D) Is usually found in manholes.

Answer --> A


1119) The water main valve that has the words Open or Shut, indicating the valves present position is called –

A) A Nonindicating valve.
B) An OS&Y valve.
C) A Post Indicator valve (PIV).
D) All of the above.

Answer --> C

1120) Which water main valve is normally buried or installed in manholes, and operated above ground through a valve box?

A) A Nonindicating valve.
B) An OS&Y valve.
C) A Post Indicator valve (PIV).
D) All of the above.

Answer --> A


1121) Isolation valves in water distribution systems are –

A) Gate valves and butterfly valves.
B) Clapper valves.
C) Ball Valves.
D) Clapper valves and butterfly valves.

Answer --> A


CodeRQ

Question change from last version. Old question listed Control Valves instead of Isolation Valves.

1122) Gate valves are normally marked with a number. What does this number indicate?

A) The diameter of the pipe.
B) The distance (in feet) to the next valve.
C) The number of turns necessary to completely close the valve.
D) The date the valve was last inspected.

Answer --> C


1123) Which water main valve rotates 90 degrees from the fully opened position to tightly shut?

A) Butterfly valve.
B) Gate valve.
C) Clapper valve.
D) PIV valve.

Answer --> A

1124) Which water main valve has a yoke on the outside with a threaded stem that controls the gate's opening or closing?
A) OS&Y valve.
B) PVC valve.
C) Butterfly valve.
D) Gate valve.

Answer --> A


1125) Water pipes are usually made from which of the following materials?
1) Cast Iron  2) Ductile Iron  3) Asbestos Cement  4) Steel  5) Plastic  6) Concrete

A) 1, 2, 4, 6.
B) 1, 4, 5, 6.
C) 2, 3, 5.
D) All the above.

Answer --> D


1126) Which type of fire hydrant would you expect in climates where the ground freezes during the year?
A) Wet–barrel.
B) Dry–barrel.
C) Combination hydrant.
D) Nordic hydrant.

Answer --> B


CodeRQ

1127) The drain in a dry barrel fire hydrant –
A) Is open when the hydrant is flowing.
B) Is closed when the hydrant is flowing.
C) Must be opened manually by the firefighter.
D) Is closed when the hydrant is partially open.

Answer --> B

1128) While your engine company is in the process of refilling its tank at a hydrant, you begin to notice the ground around the hydrant becoming saturated with water. What is the probable cause of this?

A) The main valve is defective.
B) There is a leak in the hydrant main.
C) The stem nut is jammed.
D) The hydrant is not fully opened.

Answer --> D

The hydrant must be fully opened for full closure of the drain.

1129) In the winter time, what is the procedure used to ensure that a dry hydrant drain is functioning correctly?

A) Cap all discharges except one. Cover the remaining discharge with your palm and feel for a slight suction.
B) Use a hydraulic pressure meter to measure backflow pressure.
C) Cap all discharges tightly immediately after closing hydrant valves.
D) Cap all discharges except one, Insert a pitot tube and gauge into the remaining discharge and measure the backflow pressure.

Answer --> A


1130) Although the main components of a fire hydrant are made of cast iron, the important internal working parts are made from –

A) Stainless steel.
B) Copper.
C) Bronze.
D) Aluminum.

Answer --> C


1131) Hydrants are opened by rotating the ___ with a hydrant wrench.

A) Operating stem.
B) Stem nut.
C) Check valve.
D) Flow nut.

Answer --> B

1132) Fire hydrant valve facings are normally made from which of the following materials?
(1) Teflon (2) Leather (3) Brass (4) Bronze (5) Rubber (6) Plastic (7) Composite Material

A) 3 or 4.  
B) 1 or 6.  
C) 2, 5, or 7.  
D) 1 or 4.  

Answer --> C  

CodeRQ  
Composite materials added to new answer.

1133) Which type of fire hydrant would you expect to find in warm climates where the ground does not freeze?

A) Dry Barrel hydrant.  
B) Wet Barrel hydrant.  
C) Bonnetless hydrant.  
D) Drainless hydrant.  

Answer --> B  


1134) Which of the following can affect the flow of a hydrant?

A) Proximity of a feeder.  
B) The size of the mains in which the hydrant is connected to.  
C) The amount of sedimentation which has built up in the main.  
D) All the above.  

Answer --> D  


1135) A green hydrant is capable of delivering __ of water.

A) Less than 500 gpm.  
B) 500 – 999 gpm.  
C) 1000 – 1499 gpm.  
D) 1500 or greater.  

Answer --> C  

1136) A light blue hydrant is capable of delivering __ of water.

A) Less than 500 gpm.
B) 500 – 999 gpm.
C) 1000 – 1499 gpm.
D) 1500 or more gpm.

Answer --> D


1137) A red hydrant is capable of delivering __ of water.

A) 500 gpm or less.
B) 500 – 999 gpm.
C) 1000 – 1499 gpm.
D) 1500 or more gpm.

Answer --> A


1138) An orange hydrant is capable of delivering __ of water.

A) Less than 500 gpm.
B) 500 – 999 gpm.
C) 1000 – 1499 gpm.
D) 1500 or more gpm.

Answer --> B


1139) The general rule in locating fire hydrants in high value areas, is to place a hydrant at each intersection and to space intermediate hydrants not more than –

A) 200 feet.
B) 300 feet.
C) 500 feet.
D) 600 feet.

Answer --> B

All Chapters

1140) What type of valve would you expect to find in a wet-barrel hydrant?

A) Horizontal compression-type valve.
B) Butterfly valve.
C) Gate valve.
D) Check valve.

Answer --> A


1141) When drafting from a static water source, how much water should there be above and below the hard suction line strainer?

A) 12 inches.
B) 24 inches.
C) 36 inches.
D) 48 inches.

Answer --> B


1142) When is it necessary to use a strainer at the end of a hard suction line?

A) When drafting from a swimming pool.
B) When drafting from an industrial water source.
C) When drafting from a natural water source.
D) Always.

Answer --> C


Kind of a trick question. Essentials states you need a strainer when drafting from a natural water source, however many departments SOPs require a strainer at all times. Better to be safe than sorry.

1143) Floating strainers can draft water from levels as little as –

A) 1 – 2 inches.
B) 3 – 6 inches.
C) 6 – 12 inches.
D) 24 inches.

Answer --> D


We think this is a misprint in the text, as it was in the last version. There are a lot of floating strainers on the market that can draft from much shallower depths than 24 inches.
1144) The actual valve in a dry barrel fire hydrant that allows water into the hydrant is located –

A) In the bonnet.
B) In the stem.
C) Under the barrel below the frost line.
D) At each discharge.

Answer --> C


1145) When should alternative water supply sources be identified which can be utilized in fire ground operations?

A) Upon arrival of the fire apparatus.
B) Upon arrival of the fire officer.
C) Upon arrival of the first pumper.
D) During preincident surveys.

Answer --> D


1146) Which NFPA Standard provides information on water supplies for suburban and rural fire fighting?

A) NFPA 1142.
B) NFPA 472.
C) NFPA 1403.
D) NFPA 1021.

Answer --> A


1147) Hauling water from a water supply source to a portable container from which the water may be used to fight a fire is referred to as –

A) Water porting.
B) Water channeling.
C) Water shuttling.
D) RWA (Remote Water Acquisition).

Answer --> C

1148) Water shuttles are recommended for distances greater than __, or greater than your fire department capacity for laying supply hoselines.

A) 1/4 mile or greater.  
B) 1/2 mile or greater.  
C) 3/4 mile or greater.  
D) 1 mile or greater.

Answer --> B 


1149) Normally, a portable water tank capacity ranges from __ and upward.

A) 5000 gallons of water.  
B) 2500 gallons of water.  
C) 1000 gallons of water.  
D) 500 gallons of water.

Answer --> C 


1150) According to NFPA 1901, Standard for Mobile Water Supply Fire Apparatus, a mobile water supply apparatus must be able to dump at a rate of –

A) 250 gpm.  
B) 500 gpm.  
C) 750 gpm.  
D) 1000 gpm.

Answer --> D 


1151) In relay pumping, the apparatus with the greatest pumping capacity should be located at –

A) The fire.  
B) The water source.  
C) Right in the center between the fire and the water source.  
D) Any point along the line.

Answer --> B 

1152) Which of the following factors has the greatest impact on the success of a shuttle operation?

A) The distance between the fill and dump sites.
B) The capacity of the tanks that are being use for the operation.
C) The sizes of the source and dump sites.
D) The fast-fill and fast-dump capabilities.

Answer --> D


1153) Which of the following would NOT be considered one of the three key components of a water-shuttle operation?

A) Dump site at the fire.
B) Auxiliary apparatus at the fire scene.
C) Fill site at the water source.
D) Mobile water supply apparatus to haul water from the fill site to the dump site.

Answer --> B


1154) When multiple portable tanks are used in water-shuttle operations a __ is used to effectively maintain the water level in one tank for the pumper, while water tankers/tenders dump into the others.

A) Low-level Siphon.
B) PTS (Portable Tank Siphon).
C) Jet-assisted Siphon.
D) Shuttle Siphon.

Answer --> C


1155) What is the first step firefighters should take before opening a portable tank?

A) Inspect the portable tank for leaks.
B) Ensure that the mobile water supply apparatus is on-scene.
C) Inspect the portable tank frame for structural integrity.
D) Spread a heavy tarp on the ground to help protect the liner once water is dumped into it.

Answer --> D

1156) Which of the following methods is normally used to unload water into portable tanks?

A) Gravity dumping through large dump valves.
B) Jet-assist dumps that create a venturi effect which increases the flow rate.
C) Through apparatus mounted pumps that off-load the water into the portable tank.
D) All the above.

Answer --> D

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Sometimes it is a combination of all these methods together.

1157) Whose responsibility is it to determine the distance between pumpers in a water-shuttle operation?

A) The Incident Commander
B) The Chief
C) The drivers of the apparatus
D) The Water Supply officer

Answer --> D


1158) The network of intermediate-sized mains that subdivide the grid within the various loops of primary feeders and supply of distributors is known as –

A) Branch distributors.
B) Secondary feeders.
C) Branch feeders.
D) Intermediate feeders.

Answer --> B


1159) What is the NFPA Standard for Fire Hose Connections?

A) NFPA 1960.
B) NFPA 1961.
C) NFPA 1962.
D) NFPA 1963.

Answer --> D

1160) A storage tank used during a relay or shuttle operation to hold water from water tanks or hydrants is called a –

A) Portable tank.
B) Portable pond.
C) Fold-a-tank.
D) All the above.

Answer -->  D

Also called Catch Basin, Portable Basin, or Porta-Tank.

1161) Seawater is ____ times saltier than freshwater.

A) 56.
B) 96.
C) 145.
D) 220.

Answer -->  D


1162) A control valve with a solid plate operated by a handle and screw mechanism is known as a –

A) Gate valve.
B) Post-indicator valve.
C) Butterfly valve.
D) Outside stem and yoke valve

Answer -->  A


1163) The control valve that uses a flat circular plate in a pipe that rotates 90° across the cross section of the pipe to control the flow of water is known as a –

A) Gate valve.
B) Post-indicator valve.
C) Butterfly valve.
D) Outside stem and yoke valve

Answer -->  C

1164) A type of valve used to control underground water mains that provides a visual means for indicating whether the valve is in the open or shut position is called a –

A) Gate valve.
B) Post-indicator valve.
C) Butterfly valve.
D) Outside stem and yoke valve

Answer --> B


1165) A mechanical device installed in a discharge line that senses the amount of water flowing and provides a readout in units of gallons per minute is called a –

A) Backflow preventer.
B) Flowmeter.
C) Flow monitor.
D) Control gate.

Answer --> B


1166) A check valve that prevents water from flowing back into a system and contaminating it is called a –

A) Backflow preventer.
B) Flow restrictor.
C) Flow monitor.
D) Control gate.

Answer --> A


1167) Who normally determines the location, spacing, and distribution of fire hydrants?

A) The fire marshal.
B) The Fire Chief.
C) Water supply officer.
D) Water department personnel.

Answer --> D

1168) Water mains arranged in a complete circuit so that water will be supplied to a given point from more than one direction or called –

A) Loop system.
B) Circle system.
C) Belt system.
D) All the above.

Answer -->  D
Also called circulating system.

1169) A fire hydrant that receives water from two or more directions is called a –

A) Circulating feed.
B) Circulating hydrant.
C) Dead-end hydrant.
D) A and B.

Answer -->  A
A circulating hydrant is a fire hydrant that is located on a secondary feeder or distributor main and receives water from two directions.

1170) What is the usual size of the steamer connection on a fire hydrant?

A) 3 inches.
B) 3 1/2 inches.
C) 4 inches.
D) 4 1/2 inches.

Answer -->  D

1171) Pumper outlet nozzles are fire hydrant outlets that are ____ in diameter or larger.

A) 3 inches.
B) 3 1/2 inches.
C) 4 inches.
D) 4 1/2 inches.

Answer -->  C
1172) The process of acquiring water from a static source and transferring it into a pump that is above the source's level is called –

A) Drafting.
B) Shuttling.
C) Static pumping.
D) All the above.

Answer --> A


1173) A method of water supply by which mobile water supply apparatus continuously transports water between a fill site and a dump site located near the emergency scene is called a –

A) Static shuttle operation.
B) Static transport operation.
C) Water shuttle operation.
D) Water interchange operation.

Answer --> C


1174) The use of two or more pumpers to move water over a long distance by operating them in a series is call –

A) Water shuttling.
B) Broadcast Pumping.
C) Transport pumping.
D) Relay pumping.

Answer --> D


1175) The point at which the fire department can connect into a sprinkler or standpipe system to boost the water flow in the system is called –

A) Fire department junction.
B) Fire department connection.
C) Fire department hookup.
D) Fire department juncture.

Answer --> B

Notes) Page 816, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. Also called FDC.
1176) References made to the diameter of fire hose refers to the –

A) Inside diameter.
B) Outside diameter.
C) Radius.
D) Circumference.

Answer -->  A


1177) Lengths of hose are commonly referred to as –

A) Blocks.
B) Sections.
C) Groups.
D) Couples.

Answer -->  B


Also known as lengths of hose.

1178) NFPA 1901, Standard for Pumper Fire Apparatus requires pumpers to carry at least __ of large soft sleeve intake hose.

A) 10 feet.
B) 15 feet.
C) 20 feet.
D) 25 feet.

Answer -->  B


1179) The end of a charged hoseline that is flowing water without a nozzle or valve to control its flow is called a –

A) Open line.
B) Open butt.
C) Loose flow.
D) Open current.

Answer -->  B

1180) Fire hose is manufactured in which of the following configurations?

(1) Double-jacket  (2) Single-jacket  (3) Rubber single-jacket  (4) Hard-rubber or plastic noncollapsing

A) 1, 2 .  
B) 3, 4.  
C) 1, 2, 4.  
D) 1, 2, 3, 4.  

Answer -->  D


1181) Most fire hose is cut and coupled into lengths of –

A) 25 or 75 feet.  
B) 25 or 50 feet.  
C) 50 or 75 feet.  
D) 50 or 100 feet.  

Answer -->  D


1182) Intake hose used to connect fire apparatus to a near by water source, is characterized by which of the following groups of hose?

(1) Soft sleeve hose  (2) Hard-suction hose  (3) Hard-rubber noncollapsing hose  (4) Plastic Composite hose

A) 1, 2.  
B) 2, 3.  
C) 3, 4.  
D) 1, 2, 3, 4.  

Answer -->  A

CodeRQ

Also called intake hose.

1183) Which type of hose is normally used to draft water from an open water source?

A) Soft sleeve hose.  
B) Soft intake hose.  
C) Hard suction hose.  
D) All the above.  

Answer -->  C

CodeRQ
1184) Hard intake hose normally is manufactured in which of the following sizes?

A) 1 1/2 – 2 1/2 inches.
B) 2 1/2 – 4 inches.
C) 2 1/2 – 6 inches.
D) 6 – 8 inches.

Answer --> C


1185) Which NFPA standard lists specifications for fire hose?

A) NFPA 1961.
B) NFPA 1963.
C) NFPA 1901.
D) NFPA 1001.

Answer --> A


1186) Which NFPA standard is the Standard for Automotive Fire Apparatus?

A) NFPA 1961.
B) NFPA 1963.
C) NFPA 1901.
D) NFPA 1001.

Answer --> C


1187) NFPA 1901, Standard for Pumper Fire Apparatus requires pumpers to carry at least ___ of hard suction hose.

A) 10 feet.
B) 15 feet.
C) 20 feet.
D) 25 feet.

Answer --> C


Pumpers carry two 10 foot sections of hard-suction hose.
1188) According to NFPA 1901, what is the minimum amount of supply hose that must be carried by a pumper fire apparatus?

A) 800 feet.
B) 1000 feet.
C) 1200 feet.
D) 1500 feet.

Answer --> A


1189) According to NFPA 1901, how much attack hose must be carried on a pumper fire apparatus?

A) 200 feet.
B) 300 feet.
C) 400 feet.
D) 500 feet.

Answer --> C


1190) Which is NOT a method for avoiding damaging fire hose?

A) Do not allow vehicles to run over hose.
B) Avoid exerting excess pump pressure on the hose.
C) Always keep the same position of bends when reloading the hose.
D) Avoid rough handling of hose.

Answer --> C


You should change the position of folds when reloading it on the apparatus.

1191) To avoid damage from an automobile running over a hose, firefighters should employ the use of –

A) Hose rollers.
B) Hose jackets.
C) Chafing blocks.
D) Hose bridges.

Answer --> D

1192) To help prevent a hose from suffering thermal damage, firefighters should do all of the following except –

A) Avoid drying hose on hot pavement.
B) Keep the outside woven jacket of the hose wet.
C) Run water through a seldom used hose from time to time.
D) Cover the hose bed to prevent the hose from being exposed to the sun.

Answer -->  B


Keep the outside of a woven-jacket fire hose dry when not in use.

1193) Abrasion damages caused by vibration from the apparatus can be avoided by using –

A) Hose jackets.
B) Hose rollers.
C) Chafing blocks.
D) Hose bridges.

Answer -->  C


1194) Firefighters should prevent hose from coming in close proximity of vehicle apparatus exhaust, to prevent __ from occurring?

A) Chemical damage.
B) Thermal damage.
C) Mildew damage.
D) Mechanical damage.

Answer -->  B


1195) All of the following can cause chemical damage to a hose except –

A) Ultraviolet radiation.
B) Paints.
C) Acids.
D) Petroleum products.

Answer -->  A

1196) You return from a fire in the chemistry department of the local community college. The hoselines have been exposed to a 10% solution of nitric acid. What is the best way to clean this hose?

A) Thoroughly scrub the hose with a brush and a solution of sodium bicarbonate and water.
B) Thoroughly scrub the hose with a brush and a solution of white wine vinegar and water.
C) Thoroughly scrub the hose with a brush and a solution of sodium nitrate and water.
D) The hose cannot be cleaned and should be removed from service.

Answer -->  A

You should also remove the hose from service and contact the manufacturer for further maintenance procedures.

1197) Which type of hose must be thoroughly dried before reloading on the apparatus?

A) Hard-rubber booster hose.
B) Hard intake hose.
C) Rubber-jacket collapsible hose.
D) Woven-jacket hose.

Answer -->  D


1198) Woven-jacket hose should be removed, inspected, swept, and reloaded back on apparatus if it has not been used within –

A) 1 week.
B) 30 days.
C) 6 months.
D) 1 year.

Answer -->  C


1199) Normally, most fire hose is cleaned simply by brushing it off or washing it with clear water. How would you wash fire hose if it were exposed to oil?

A) Clear water.
B) Mild soap or detergent.
C) Mineral spirits mixed with water.
D) 10% alcohol solution.

Answer -->  B

1200) The most common types of hose washing machines will wash fire hose up to __ in diameter.

A) 2 inches.
B) 3 inches.
C) 6 inches.
D) 8 inches.

Answer --> B


1201) Fire hose couplings are normally made from varied percentages of all of the following alloys except –

A) Brass.
B) Bronze.
C) Aluminum.
D) Magnesium.

Answer --> B


1202) In the fire service, the most commonly used hose couplings are –

A) Threaded and nonthreaded types.
B) Quarter turn.
C) Oilfield rocker lug.
D) Snap (Jones snap).

Answer --> A


1203) The part of the coupling that serves as the point of attachment of the hose is called the –

A) Base.
B) Nose.
C) Shank.
D) Source.

Answer --> C


Also called the tailpiece, bowl, or shell.
1204) Threaded couplings are either __ or __ types.

A) 1 piece, 2 piece.
B) 2 piece, 4 piece.
C) 3 piece, 4 piece.
D) 3 piece, 5 piece.

Answer --> D


1205) When two or more hoselines are joined together how can a firefighter distinguish the male side of the coupling from the female side?

A) The male side is made from a different alloy than the female side.
B) The male side displays a larger shank.
C) By noting the location of the Higbee cut.
D) By noting the presence of the rocker lugs or pins on the shank. Only male shanks have rocker lugs or pins.

Answer --> D


Knowledge of this little fact could someday save your life. The shank on the female coupling is smooth. It has no rocker lugs. The female swivel has lugs, but not the shank. Remember this. If you are in total darkness, and disoriented, the hoseline can lead you out of a building.

Always feel for the presence of rocker lugs on the mail coupling. Follow the male coupling and it will lead you out of the building.

Remember the male coupling is next to the hose. The smooth female coupling is also next to the hose. The female swivel is on the opposite side of the female shank. So feel for the hose and then move your hand until you feel the shank. If it is smooth it is the female end. If it has rocker lugs, its the male. Follow the male.

1206) What is the main purpose of the "Higbee cut?"

A) Helps prevent cross-threading of the coupling.
B) Helps prevent couplings from becoming too tight.
C) Helps reduce friction loss.
D) Serves as a point of attachment for a spanner wrench.

Answer --> A

1207) Which type of coupling lug is not commonly ordered, because of its tendency to hang when the hose is dragged over objects?

A) Pin–lug.
B) Rocker.
C) Recessed.
D) Surface.

Answer --> A


1208) Booster lines commonly have which type of coupling lugs?

A) Pin–lug.
B) Rocker.
C) Recessed.
D) Booster lines normally do not have couplings.

Answer --> C


1209) Which hand tool is normally used to tighten and loosen fire hose couplings?

A) Adjustable wrench.
B) Monkey wrench.
C) Spanner wrench.
D) Locking wrench.

Answer --> C


1210) Storz-type couplings (sexless couplings) are designed to connect and disconnect from each other with only a –

A) 1/4 turn.
B) 1/3 turn.
C) 1/2 turn.
D) 3/4 turn.

Answer --> B


CodeRQ

Answer change again from last version. The 4th Edition stated on page 405 to be 1/3 turn. Essentials 5th Edition page 641 has it at 1/4 turn. The answer is again back to 1/3 turn.
All Chapters

1211) How should the swivel of a fire hose coupling be cleaned?
   A) It should be sent through a hose washing machine.
   B) With a wire brush to remove tar, asphalt, or other foreign material.
   C) It should be submerged in warm, soapy water and worked forward and backward.
   D) All the above.

   Answer --> C


   Hose-washing machines will not clean coupling sufficiently. The male coupling may need to be
   cleaned with a stiff brush, or wire brush if the threads are clogged with tar, asphalt, or other
   foreign materials.

1212) Hose that is used by trained firefighters to combat fires is called –
   A) Attack hose.
   B) Supply hose.
   C) Fire hose.
   D) All the above.

   Answer --> A


1213) Hose that is designed for the purpose of moving water between the water source and a
   pump that is supplying attack hoselines or fire suppression systems is called –
   A) Supply hose.
   B) Intake hose.
   C) Water shuttle hose.
   D) Soft suction hose.

   Answer --> A


1214) Intake hose that connects pumping apparatus or portable pumps to a water source is
   called –
   A) Soft sleeve hose.
   B) Hard suction hose.
   C) Suction hose.
   D) Intake suction hose.

   Answer --> C

All of the following would be considered hose appliances except –

A) Valve devices.
B) Wyes.
C) Hose clamps.
D) Water thieves.

Answer --> C


Hose appliances have water flowing through them. Hose tools do not.

All of the following would be considered hose tools except –

A) Siamese.
B) Hose rollers.
C) Spanner wrenches.
D) Hose clamps.

Answer --> A


Hose appliances have water flowing through them. Hose tools do not.

Which type of valve is used to control water flowing from a hydrant and has a baffle that is moved by a handle or screw arrangement?

A) Ball valve.
B) Gate valve.
C) Butterfly valve.
D) Clapper valve.

Answer --> B


Which type of valve is used in a siamese appliance to allow only one intake hose to be connected and charged before additional hoses are connected.

A) Ball valve.
B) Gate valve.
C) Butterfly valve.
D) Clapper valve.

Answer --> D

1219) Which valve is used in large pump intakes, and uses a flat baffle operated by a quarter-turn handle?

A) Ball valve.
B) Gate valve.
C) Butterfly valve.
D) Clapper valve.

Answer --> C


1220) Which valve is closed when the handle is at right angles to the hose and open when the handle is in line with the hose? Used in pumper discharges and gated wyes.

A) Ball valve.
B) Gate valve.
C) Butterfly valve.
D) Clapper valve.

Answer --> A


1221) The hose appliance which has two or three female connectors coming into the appliance, and a single male discharge exiting the appliance is called a –

A) Wye.
B) Siamese.
C) Water Thief.
D) Manifold.

Answer --> B


Firefighters sometimes confuse Siamese and wye appliances because of their similar appearances. Wye appliances divide a single hoseline into multiple lines, while a Siamese combines multiple lines into one line.

1222) The hose appliance which has one large female intake coming into the appliance and 2 or more male discharges exiting the appliance is called a –

A) Wye.
B) Siamese.
C) Water Thief.
D) Manifold.

Answer --> A

1223) The most common wye has –

A) One 2 1/2 inch inlet and two 1 1/2 inch outlets.
B) Two 2 1/2 inch inlets and one 1 1/2 inch outlet.
C) One 1 1/2 inch inlet and two 2 1/2 inch outlets.
D) Two 1 1/2 inch inlets and one 1 1/2 inch outlet.

Answer -->  A


1224) What are Siamese appliances commonly used for?

A) Overcoming friction loss problems in hose lays that must carry a large flow of water over a long distance.
B) Allowing two or more attack hoselines to be used off the same supply line.
C) Increasing the rate in which the water is pumped.
D) Connecting two hoselines of different diameter.

Answer -->  A


1225) Any of a variety of hose appliances with one female inlet for 2 1/2 inch or larger hose with three gated outlets, usually two 1 1/2 inch outlets and one 2 1/2 inch outlet is called a –

A) Wye.
B) Siamese.
C) Water Thief.
D) Manifold.

Answer -->  C


1226) Which fitting is used to close off female couplings?

A) Hose caps.
B) Hose plugs.
C) Reducers.
D) Hose shunts.

Answer -->  B

1227) Which fitting is used to close off male couplings?

A) Hose caps.
B) Hose plugs.
C) Reducers.
D) Hose clamps.

Answer --› A


1228) Which of the following is intended to prevent damage to a hose when it is dragged over sharp surfaces such as roof edges and windowsills?

A) Hose Jackets.
B) Hose Bridges.
C) Hose Rollers.
D) Hose clamps.

Answer --› C


1229) You are pumping an engine when you notice that a portion of hose has ruptured. Crews are inside fighting a structure fire and you have no time to shut down the line and replace the ruptured hose. What is the first hose tool you should consider using?

A) Hose clamp.
B) Hose jacket.
C) Hose connector.
D) None of the above. You need to shut down the line.

Answer --› B


1230) Which of the following are examples of hose clamps?

(1) Screw-Down  (2) Hydraulic Press  (3) Self-Locking Press  (4) Press-Down

A) 1, 3.
B) 3, 4.
C) 1, 2, 3.
D) 1, 2, 4.

Answer --› D

1231) In which circumstance would you consider utilizing a hose clamp?

A) To prevent charging a hose bed during a hose lay operation.
B) To extend a hoseline without having to shut the water supply line down.
C) To allow advancement of a hoseline up a stairway.
D) All the above.

Answer -->  D


Also, to allow replacement of a burst hoseline without having to shut the line down.

1232) How far behind the apparatus should a hose clamp be applied? At least –

A) 5 feet.
B) 10 feet.
C) 15 feet.
D) 20 feet.

Answer -->  D


1233) Firefighters should apply hose clamps no farther than __ from a coupling on the incoming water side.

A) 5 feet.
B) 10 feet.
C) 15 feet.
D) 20 feet.

Answer -->  A


1234) Firefighters should exercise extra caution by standing to one side when applying and releasing –

B) A screw–Down hose clamp.
C) A hydraulic Press.
D) Any type of hose clamp

Answer -->  D

1235) The primary purpose of a spanner wrench is to –

A) Pull nails.
B) Close gas valves.
C) Tighten and loosen couplings.
D) Pry objects open.

Answer --> C


1236) What tool would a firefighter use to tighten intake hose couplings to ensure an airtight connection?

A) Rubber mallet.
B) Sledge hammer.
C) Pocket spanner wrench.
D) Hydrant wrench.

Answer --> A


1237) All of the following can be used as an aid in carrying and handling charged hoselines except –

A) Hose strap.
B) Hose holder.
C) Hose chain.
D) Hose rope.

Answer --> B


1238) Which hose roll is used to produce a compact roll that may be transported and carried for special applications such as high-rise operations?

A) Straight roll.
B) Donut roll.
C) Twin donut roll.
D) Triple donut roll.

Answer --> C

1239) Which hose roll consists of starting at one end (usually the male end) and rolling the hose towards the other end? When completed, the male coupling is protected in the center of the roll and the female coupling is exposed.

A) Straight roll.
B) Donut roll.
C) Twin donut roll.
D) Triple donut roll.

Answer --> A


1240) Which hose roll is used in situations where the hose is going to be deployed for use directly from the roll?

A) Straight roll.
B) Donut roll.
C) Twin Donut roll.
D) Self-Locking Twin Donut roll.

Answer --> B


1241) A coupling with no distinct male or female components is called a –

A) Threaded coupling.
B) Nonthreaded coupling,
C) Storz coupling.
D) B and C.

Answer --> D


1242) Which hose roll has a built in carrying strap formed from the hose itself?

A) Straight roll.
B) Donut roll.
C) Twin Donut roll.
D) Self-Locking Twin Donut Roll.

Answer --> D

1243) The purpose of a "Reducer" is to –

A) Extend a larger diameter hoseline by connecting a smaller diameter hoseline to the end.
B) Extend a smaller diameter hoseline by connecting a larger diameter hoseline to the end.
C) Prevent cross threading when attaching hoselines of different diameter.
D) Reduces the amount of friction exerted on the hoseline when water is pumped at high volumes.

Answer --> A


1244) All of the following are examples of hose loads except the –

A) Horseshoe load.
B) Figure eight load.
C) Flat load.
D) Accordion load.

Answer --> B


1245) Hose that is laid progressively on edge in folds that lie adjacent to each other, best describes which of the following hose loads?

A) Accordion load.
B) Horseshoe load.
C) Flat load.
D) Edge load.

Answer --> A


1246) Hose that is laid on edge around the perimeter of the hose bed in a "U" shape configuration, best describes which of the following hose loads?

A) Accordion load.
B) Horseshoe load.
C) Flat load.
D) Edge load.

Answer --> B

1247) Which of the following hose loads is the easiest to load on to the apparatus?

A) Accordion load.
B) Horseshoe load.
C) Flat load.
D) Edge load.

Answer --> C


1248) The main disadvantage of the flat hose load is –

A) It is subject to wear on the edges of the hose.
B) It comes out of the hose bed in a wavy snake like pattern upon the street.
C) It contains sharp bends at both ends which require that the hose be periodically reloaded to prevent damaging the lining.
D) Is more subject to wear from apparatus vibration during travel than the other loads.

Answer --> C


1249) Firefighters should follow all of the following guidelines regarding hose loading except –

A) Check the gaskets and swivels before connecting any couplings.
B) Remove any kinks twists from the hose when it must be bent to form a loop in the hose bed.
C) Couplings should be tightened by hand and firefighters should never use wrenches or undue force.
D) Keep the flat sides of the hose in the same plane when two sections of the hose are connected, making sure that all lugs are aligned as well.

Answer --> D


It is not necessary to align the lugs, but you should keep the flat sides of the hose in the same plane when two sections of hose are connected.

1250) How can a firefighter tell if fire hose has been properly loaded on to the hose bed?

A) A firefighter should not be able to slide his/her hand between the folds.
B) A firefighter should not be able to slide the tip of a Halligan bar between the folds.
C) A firefighter should be able to slide his/her gloved hand between the folds.
D) A firefighter should be able to slide the tip of a Halligan bar between the folds.

Answer --> C

1251) The hose lay for large diameter hose should be started __ from the front of the hose bed.

A) 2 to 6 inches.
B) 6 to 12 inches.
C) 12 to 18 inches.
D) 18 to 22 inches.

Answer --> C


The extra space is reserved for the couplings. It allows them to pay out without flipping them over.

1252) Which hose load is the best way to load large diameter hose?

A) Flat load.
B) Horseshoe load.
C) Accordion load.
D) Edge role.

Answer --> A


1253) Extra hose added to the basic load to provide enough hose to make a hydrant connection, and also to provide a working line on the fire ground is called a(an) --

A) Attack prep load.
B) Straight prep.
C) Hose load finish.
D) Hose load source.

Answer --> C


1254) A short fold or reverse bend in the hose for the purpose of preventing complications with couplings while the hose is being pulled out is commonly called a --

A) Kink.
B) Hose fold.
C) Safety fold.
D) Dutchman.

Answer --> D

1255) Which hose finish would you utilize when making a forward lay?
A) Straight finish.
B) Straight horseshoe finish.
C) Reverse horseshoe finish.
D) Reverse accordion finish.

Answer --> A


1256) Which hose finish would you utilize when making a reverse lay?
A) Straight finish.
B) Straight horseshoe finish.
C) Reverse horseshoe finish and skid load finish.
D) Reverse accordion finish.

Answer --> C


1257) What is the main advantage of using a straight finish?
A) It can be carried to the fire ground by one firefighter.
B) Expedites removing fire fighting equipment.
C) Speeds up the operation of pulling hose when making a hydrant.
D) Can be utilized for a preconnected line.

Answer --> C


1258) The preconnected hose load, that can be pulled and advanced by one firefighter; that is slung over the shoulder and advanced, while the load pays off the firefighter's shoulder is called -
A) Minuteman load.
B) Triple layer load.
C) Preconnected flat load.
D) Booster load.

Answer --> A

1259) The type of non collapsible hose, which is stored upon a reel, that can be quickly deployed by firefighters, is called –

A) Minuteman load.
B) Triple layer load.
C) Preconnected flat load.
D) Booster hoseline.

Answer -->  D


1260) What is the main disadvantage of a Triple Layer Load?

A) The three layers which can be as long as 50 feet, have to be completely removed before leading in the nozzle end of the hose.
B) The load can snag on obstacles.
C) The load is awkward to carry while wearing SCBA.
D) It can not be used for 2 and 2 1/2 inch hose.

Answer -->  A


1261) Threaded couplings are usually arranged so that –

A) The male coupling is towards the water source and the female coupling is towards the fire.
B) The female coupling is towards the water source and the male coupling is towards the fire.
C) Does not matter as long as you are using a forward lay.
D) Does not matter as long as you are using a reverse lay.

Answer -->  B


1262) When hose is laid from the water source to the fire, it is called a –

A) Reverse lay.
B) Combination lay.
C) Forward lay.
D) Inverted lay.

Answer -->  C

1263) When hose is laid from the fire to the water source it is called a –

A) Reverse lay.  
B) Combination lay.  
C) Forward lay.  
D) Inverted lay.  

Answer -->  A  


1264) If an apparatus is equipped with Storz couplings, firefighters must use –

A) A forward lay.  
B) A reverse lay.  
C) A combination lay.  
D) Does not matter as long as the pump operator is equipped with the proper fittings and adapters.  

Answer -->  D  


1265) The primary advantage of a forward lay is that –

A) The first-in engine company can size-up the fire scene before laying a supply line.  
B) The pumper is able to remain at the scene so its equipment can be easily accessed by firefighters.  
C) It prevents the need for a second pumper in setting up a relay pumping operation.  
D) It is not necessary to use a four-way hydrant valve.  

Answer -->  B  


1266) Which of the following equipment would be used by a firefighter to make a hydrant?

(1) Spanner wrench  
(2) Hydrant wrench  
(3) Four-way hydrant valve  
(4) Rubber mallet  
(5) Reducers  

A) 2, 3.  
B) 2, 3, 4.  
C) 1, 2, 3.  
D) 1, 2, 4, 5.  

Answer -->  C  

1267) When performing a forward lay operation, which of the following is used to anchor the hose?

A) Service pole.
B) Sturdy sign post.
C) Mailbox.
D) Hydrant.

Answer --> D


1268) Which of the following has become the standard method for setting up a relay pumping operation?

A) Laying hose from the water source back to the fire scene.
B) Laying hose from the fire scene back to the water source.
C) Utilizing a split lay is always the best way to set up a relay pumping operation.
D) There is no standard method for setting up a relay pumping operations. Relay pumping set up is dictated by the situation.

Answer --> B


1269) When making pumper to hydrant connections, what techniques are used to prevent any kinks from forming in the hose when the line is charged?

A) Make sure the hose is laid out flat, with the male and female coupling in-line with each other.
B) Use of hard suction connections between the hydrant and the apparatus is an effective and easy method of reducing kinks.
C) Put two twists in the hose before making the connections.
D) None of the above are effective.

Answer --> C


1270) Which of the following would constitute a "combination lay?"

A) Two lines laid forward.
B) Two lines laid reverse.
C) A forward lay followed by a reverse lay.
D) All the above.

Answer --> D

1271) Advancing a __ involves placing the nozzle and the fold of the first tier on the firefighter’s shoulder, and walking away from the apparatus towards the fire.

A) Preconnected flat load.
B) Minuteman load.
C) Triple layer load.
D) Wyed line load.

Answer --> C


1272) Firefighters entering a burning building should do all of the following except –

A) Feel the door using the back of the hand with glove off.
B) Stay low and out of the doorway thus avoiding blocking ventilation.
C) Have backup firefighter(s) stand on the opposite side of the hose, than the firefighter on the nozzle to ensure stability.
D) Bleed any air out of the line before entering the fire area.

Answer --> C


Firefighters should always position themselves on the same side of the hoseline.

1273) In most cases involving advancing hoselines downstairs, firefighters should do which of the following?

A) The line should be charged when advancing hoselines downstairs.
B) The line should not be charged when advancing hoselines downstairs.
C) The line should only be charged if the firefighters are sure there is fire present.
D) Firefighters should never advance hoseline downstairs in working structure fires.

Answer --> A


CodeRQ

1274) When fighting tall building fires, which of the following statements is true?

A) Preconnected hoselines should be pulled from the apparatus and advanced to the fire area without regard for the distance between the apparatus and the fire.
B) Hose should be carried into the building and connected to stand pipes located one floor above the fire floor.
C) Hose should be carried into the building and connected to stand pipes located one floor below the fire floor.
D) Hose should be carried into the building and connected to standpipes located on the same floor as the fire.

Answer --> C

1275) How many firefighters are needed to advance a dry hoseline up a three section ladder?

A) 2  
B) 3  
C) 4  
D) 5  

Answer --> B


Only one person is allowed on each section of the ladder.

1276) How many firefighters are needed to secure a 2 1/2 inch hose; when the hose is positioned in a large loop and crosses the loop over the line about 2 feet from behind the nozzle, where the nozzleman sits on the hose where it crosses?

A) 1  
B) 2  
C) 3  
D) 4  

Answer --> A


1277) Which of the following is the safest way to control a loose hoseline?

A) Position a hose clamp 5 feet from the closest coupling to the water source.  
B) Place a kink in the hose close to the water source.  
C) Make a flying leap for the nozzle.  
D) Cut off water flow to the hoseline.

Answer --> D


1278) When using the One–Firefighter method for operating a small size hose and nozzle, the hoseline should be straight for at least ___ behind the nozzle, and the firefighter should face in the direction the fire stream is projecting.

A) 4 feet.  
B) 5 feet.  
C) 10 feet.  
D) 12 feet.

Answer --> C

1279) In utilizing the Two-Firefighter method of handling hoselines, the backup firefighter should do which of the following?

A) Stand 3 feet behind the nozzleman.
B) Keep the hose straight behind the nozzleman.
C) Braces the hose against his(her) waist and hip.
D) All the above.

Answer --> D


1280) The method for breaking a coupling in which a single firefighter stabilizes the coupling by placing one knee on the hose and shank of the female coupling, while rotating the swivel, is known as –

A) Foot-tilt method.
B) Knee-press method.
C) Stiff-arm method.
D) Stiff-leg method.

Answer --> B


1281) Firefighter Bill and Firefighter Bob are attempting to couple a fire hose using the two firefighter method. Firefighter Bill has the male coupling and Firefighter Bob has the female coupling. Which of the following would best describe Firefighter Bill’s role in this operation?

A) Firefighter Bill brings the two couplings together and aligns their positions.
B) Firefighter Bill notes the location of the Higbee indicator.
C) Firefighter Bill does nothing but hold the male coupling.
D) Firefighter Bill turns the female swivel clockwise to complete the connection.

Answer --> C


It also helps if Firefighter Bill looks away in another direction. That makes it easier for Firefighter Bob to make the connection without Bill trying to help.

1282) Why should dry hose be rolled in a straight roll for storage?

A) To prevent the hose jacket from becoming mildewed.
B) To protect the male coupling.
C) It prevents mechanical damage to the hose jacket.
D) To keep the liner from drying out.

Answer --> D

1283) Which hose appliance allows an original supply line to be connected to a hydrant and charged before the arrival of another pumper at the hydrant.

A) Hydrant valve.  
B) Water thief.  
C) Manifold.  
D) Gated Wye.  

Answer --> A  

1284) A device that facilitates the connection of hose lines of different sizes to provide an uninterrupted flow of extinguishing agent is called –

A) Adapter.  
B) Fitting.  
C) Reducer.  
D) Enlarger.  

Answer --> B  

1285) A fitting for connecting hose couplings with dissimilar threads, but comprising the same inside diameter is called –

A) Adapter.  
B) Intake device.  
C) Reducer.  
D) Coupling device.  

Answer --> A  

1286) An adapter used to attach a smaller hoseline to a larger one is called –

A) Reducing adapter.  
B) Reducing device.  
C) Reducer.  
D) Condenser.  

Answer --> C  
1287) The main hose-carrying area of a pumper or other piece of apparatus designed to carry hose is called the –

A) Hose stall.
B) Hose compartment
C) Hose bed.
D) Hose hold.

Answer --> C


1288) An arrangement of hose usually placed on top of a hose load and connected to the end of the load is called the –

A) Finish.
B) Ending.
C) Termination.
D) Finale.

Answer --> A


Also called hose load finish.

1289) Which hose load finish consists of folding the last three lengths of hoseline into a compact bundle on top of the rest of the hose load?

A) Straight finish.
B) Reverse horseshoe finish.
C) Skid load finish.
D) Dutchman's finish.

Answer --> C


1290) The primary lines used for fire attack by most fire departments are –

A) Minuteman packs.
B) Preconnected hoselines.
C) 1 3/4 inch loads.
D) Fixed master streams.

Answer --> B

1291) A hose lay deployed by two pumpers, one making a forward lay and one making a reverse lay from the same point is called a –

A) Broken lay.
B) Combination lay.
C) Center lay.
D) Split lay.

Answer -->  B

CodeRQ
Answer change from last version. Old answer was D split lay.

1292) The quickest and easiest way to move fire hose at ground level is by utilizing the –

A) Ground drag.
B) Fast drag.
C) Working line drag.
D) Shoulder drag.

Answer -->  C


1293) When should firefighters use elevators in burning buildings?

A) When the stairwells are full of smoke.
B) When the stairwells are involved in fire.
C) When the building is over 10 stories.
D) In rare instances.

Answer -->  D


1294) The procedure for kinking a hose to control a loose hoseline is effective in all but which of the following hose?

A) Forestry hose.
B) 1 3/4 inch hose.
C) 2 1/2 inch hose.
D) LDH hose.

Answer -->  D

LDH hose is too large and too heavy to kink when charged.
1295) The boiling point of water is –

A) 100 degrees F.
B) 140 degrees F.
C) 200 degrees F.
D) 212 degrees F.

Answer --> D


A firefighter should know that scalding of skin will occur at 140 degrees F.

1296) At its boiling point, water will expand approximately __ times its normal volume.

A) 500
B) 1000
C) 1200
D) 1700

Answer --> D


1297) The primary way water extinguishes fire is by –

A) Smothering the fire.
B) Cooling the fire by absorbing its heat.
C) Chemically inhibiting the fire.
D) Removing the fuel from the fire.

Answer --> B


CodeRQ

Water absorbs heat from the fire thus extinguishing it.

1298) Which of the following statements regarding the characteristics of water are NOT true?

A) Water has a greater heat-absorbing capacity than other common extinguishing agents.
B) A relatively small amount of heat is required to change water into steam.
C) Water is readily available and relatively inexpensive.
D) Water can be applied in a variety of ways.

Answer --> B


CodeRQ

A relatively large amount of heat is required to change water into steam. There is a high latent heat of vaporization.
1299) All of the following factors will influence the way a stream of water or other extinguishing agents pass through space except –

A) Barometric pressure.
B) Gravity.
C) Wind.
D) Air friction.

Answer --> A


CodeRQ

Also the stream is affected by –

The velocity of the water.
The operating pressure.
The nozzle design an adjustment.
The condition of the nozzle opening.
The fire streams that are utilized.

1300) The condition in which a fire stream leaves a nozzle is influenced by which of the following factors?

(1) Operating Pressure  (2) Nozzle Manufacturer  (3) Nozzle Design  (4) Nozzle Adjustment
(5) Condition of the nozzle orifice

A) 1, 2, 3, 4.
B) 1, 2, 4, 5.
C) 1, 3, 4, 5.
D) 1, 2, 3, 4, 5.

Answer --> C


1301) __ is defined as the loss of pressure created by the turbulence of water moving against the interior walls of fire hose, pipes, fittings, and adapters.

A) Friction pressure.
B) Friction loss.
C) Vapor pressure.
D) Velocity pressure.

Answer --> B


CodeRQ
1302) Parallel or siamese hoselines are used in order to –

A) Reduce flow and reduce friction.
B) Increase flow and increase friction.
C) Increase flow and reduce friction.
D) Reduce flow and increase friction.

Answer --> C


1303) In order to reduce pressure loss due to friction, firefighters should do all but which of the following?

A) Use adapters only when necessary.
B) Eliminate sharp bends.
C) Use short lines as much as possible.
D) Keep nozzles and valves only partially open when possible.

Answer --> D


Nozzles and valves should be fully open.

1304) In fire fighting elevation refers to –

A) The current floor the attack lines are working on.
B) The position of the fire in relation to sea level.
C) The position of the nozzle in relation to the pumping apparatus.
D) The position of the pumping apparatus in relation to sea level.

Answer --> C


1305) __ refers to the gain or loss of pressure in a hoseline due to a change in elevation.

A) Elevation pressure.
B) Elevation friction.
C) Elevation effect.
D) Elevation velocity.

Answer --> A

1306) The effects of elevation pressure are caused by which of the following factors?

A) The effect of gravitational pull from the moon on any given day of the month.
B) The force of gravity.
C) The rate in which the water is pumped.
D) Barometric pressure and other weather factors.

Answer -->  B


1307) When water flowed through a hoseline or pipe is suddenly stopped, the resulting surge of pressure is referred to as –

A) Water hammer.
B) Water surge.
C) Hyper–water surge.
D) Water wrench.

Answer -->  A


1308) Which of the following is not a major type of fire stream.

A) Solid.
B) Broken.
C) Fog.
D) Mist.

Answer -->  D


1309) Fire streams are classified into one of three sizes. Which of the following does not represent one of the three?

A) Low–volume stream.
B) High–volume stream.
C) Handline stream.
D) Master stream.

Answer -->  B

1310) The best way to avoid causing a water hammer is to –

A) Shut down pumpers before any nozzles, or valves are closed.
B) Close nozzles and valves slowly.
C) Close nozzles and valves quickly.
D) Any of the above depending on the situation.

Answer -->  B


That includes hydrants, control valves, and hose clamps.

1311) A fire stream that discharges less than 40 gallons per minute would be classified as a –

A) Low volume stream.
B) Handline stream.
C) Hoseline stream.
D) Master stream.

Answer -->  A


1312) A fire stream that discharges 40 to 350 gallons per minute would be considered a –

A) Low volume stream.
B) Handline stream.
C) Broken stream.
D) Master stream.

Answer -->  B


1313) A fire stream that discharges more than 350 gpm would be classified as a –

A) Booster stream.
B) Tanker stream.
C) Master stream.
D) Pumper stream.

Answer -->  C

1314) Which of the following are essential components of a fire stream?

(1) Pump  (2) Wetting agent  (3) Hose  (4) Proportioner  (5) Agent  (6) Nozzle

A) 1, 2, 3, 4, 5, 6.
B) 1, 3, 5, 6.
C) 1, 3, 4, 5, 6.
D) 1, 3, 4, 6.

Answer -->  B


1315) The fire stream produced from a fixed, smoothbore nozzle is known as a –

A) Fog stream.
B) Solid stream.
C) Water curtain.
D) Broken stream.

Answer -->  B


1316) Fog nozzles permit which of the following fire stream patterns?

(1) Straight stream  (2) Narrow-angle fog  (3) Water curtain  (4) Wide angle fog

A) 2, 3, 4.
B) 1, 3, 4.
C) 1, 2, 4.
D) 1, 2, 3, 4.

Answer -->  C


1317) Fire streams that have been formed into coarse divided droplets are known as –

A) Solid streams.
B) Straight streams.
C) Broken streams.
D) Fog streams.

Answer -->  C

1318) Which fire stream is less likely to disturb the thermal layering in an interior structure fire attack?

A) Solid stream.
B) Broken stream.
C) Fog stream.
D) Foam stream.

Answer --> A


1319) If a solid stream is used on a handline it should be operated at –

A) 25 psi.
B) 50 psi.
C) 80 psi.
D) 100 psi.

Answer --> B


1320) A solid master stream device should operate at a pressure of –

A) 25 psi.
B) 50 psi.
C) 80 to 100 psi.
D) Over 100 psi.

Answer --> C


CodeRQ

Answer change from last version – old answer was 80 psi.

1321) Which of the following statements regarding solid streams is NOT true?

A) Solid streams have a greater reach than other types of streams.
B) Solid streams have greater penetration power than other types of streams.
C) Solid streams operate at reduced nozzle pressures per gallon than other types of streams.
D) Solid streams can absorb more heat than other types of streams.

Answer --> D


Solid streams provide less heat absorption per gallon delivered than other types of streams.
1322) Typically, all of the following would be considered broken stream nozzles except –

A) Automatic nozzle.
B) Water curtain nozzle.
C) Cellar nozzle.
D) Piercing nozzle.

Answer -->  A


Automatic nozzles produce fog streams.

1323) The point at which a fire stream begins to lose its forward velocity is known as –

A) Point of breakover.
B) Point of friction equilibrium.
C) Point velocity reduction.
D) Point of jet reduction.

Answer -->  A


1324) The desired performance of a fog nozzle is judged by –

A) The angle of the fog pattern.
B) The amount of heat the fog stream can absorb.
C) The distance the fog stream can travel.
D) The ease in which the firefighter can hold the nozzle.

Answer -->  B


1325) Firefighters would used broken stream nozzles in all of the following situations except –

A) Class C fires.
B) Attic fires.
C) Confined space fires.
D) Below ground fires.

Answer -->  A


Obviously, a Class C fire is an electrical fire.
1326) All of the following would be considered one of the three principle types of control valves in handline nozzles except –

A) Ball valve.
B) Butterfly valve.
C) Slide valve.
D) Rotary valve.

Answer -->  B


1327) The major difference between the rotary control valve and other types of handline nozzle valves, is which of the following –

A) Nozzles with rotary control valves have a greater reach than other types.
B) The rotary control valve allows for greater nozzle pressure.
C) Nozzles with rotary control valves possess a limited stream angle range.
D) The rotary control valve also controls the discharge pattern.

Answer -->  D


1328) The nozzle that utilizes a sliding cylinder, which depending on its relative position to the cone, determines the amount of water flow, best describes which of the following nozzle control valve types?

A) Ball valve.
B) Slide valve.
C) Butterfly valve.
D) Rotary valve.

Answer -->  B


1329) Maintenance for fire nozzles should include which of the following?

A) Thoroughly cleaning with soap and water and a soft bristle brush.
B) Thoroughly cleaning with soap and water with a stiff wire brush.
C) Soaking the nozzle in 70% ethanol for at least one hour.
D) Soaking the nozzle in a 50:50 acetone solution for at least one hour.

Answer -->  A

1330) What may be the consequence, if ventilation is not provided ahead of hose teams involved in a direct or combination fire attack?

A) The water will have little or no cooling effect upon the fire.
B) The expansion capability of the water will be greatly reduced.
C) There is a high possibility that steam and even fire will roll back over and around the hose team.
D) Water will change to steam at a much slower rate.

Answer -->  C


1331) Which method of proportioning is the simplest and most accurate way of mixing foam concentrate and water?

A) Induction.
B) Injection.
C) Batch–mixing.
D) Premixing.

Answer -->  C


1332) Which method of proportioning is typically used with portable extinguishers, wheeled extinguishers, skid–mounted twin–agent units, and vehicle–mounted tank systems?

A) Induction.
B) Injection.
C) Batch–mixing.
D) Premixing.

Answer -->  D


1333) Which of the following statements regarding maintaining nozzles is not correct?

A) Never drag or drop nozzles.
B) Thoroughly clean nozzles after each use with soap and water using a soft bristle brush.
C) Store nozzles with the control bale in the open position.
D) Use the flush setting on fog nozzles to remove any internal debris.

Answer -->  C

Store nozzles with the control bale in the closed position.
1334) Which of the following would not be considered one of the five factors that affect the reach of a fire stream?


A) 1  
B) 4  
C) 2  
D) 5  

Answer -->  A  


1335) Which statement regarding the use of fog streams is not true?

A) Fog streams do not have as much reach or penetrating power as solid streams.  
B) Fog streams are affected by wind than are solid streams.  
C) Fog streams help maintain the thermal layer better than solid streams.  
D) Fog streams may push air into the fire area, thus intensifying the fire.  

Answer -->  C  


Fog streams disrupt the thermal layer in a room or compartment if applied incorrectly.

1336) Which is the most common nozzle control valve that provides effective control during nozzle operation with a minimum of effort.

A) Ball valve.  
B) Slide valve.  
C) Rotary control valve.  
D) All the above are equally common.  

Answer -->  A  


1337) IFSTA defines a handline nozzle as any nozzle that 1 to ____ can safely handle.

A) 2 firefighters.  
B) 3 firefighters.  
C) 4 firefighters.  
D) 5 firefighters.  

Answer -->  B  

CodeRQ
1338) IFSTA defines a handline nozzle that flows less than –

A) 100 gpm.
B) 150 gpm.
C) 250 gpm.
D) 350 gpm.

Answer -->  D


1339) The use of solid-bore nozzles is limited to –

A) Certain Class A foam applications.
B) All Class A, and some Class B fires.
C) All Class A, B, and de-energized Class C fires.
D) Class D and Class K fires only.

Answer -->  A


CodeRQ

1340) The amount of heat required to raise the temperature of a specific unit mass of a material 1 degree in temperature is known as –

A) A calorie.
B) A BTU.
C) Latent heat of vaporization.
D) Specific heat.

Answer -->  D


1341) The quality of heat absorbed by a substance at the point at which it changes from a liquid to a vapor is known as –

A) Evaporation.
B) Condensation.
C) Latent heat of vaporization.
D) Specific heat.

Answer -->  C

1342) What is the latent heat of vaporization of water at its boiling point of 212 Fahrenheit?
A) 465 BTU/lb.
B) 675 BTU/lb.
C) 970 BTU/lb.
D) 1232 BTU/lb.
Answer --> C

1343) In a compartment fire, the volume of steam that is produced depends on –
A) The amount of water that is applied.
B) The extent of the fire within the compartment.
C) The amount of friction loss within the hoseline.
D) The configuration of the fire stream.
Answer --> A

1344) The efficiency with which a fire stream absorbs heat is largely dependent upon –
A) The surface area of the water introduced onto the fuel surface.
B) The surface area of the water introduced into the heated environment.
C) The flow of water coming from the nozzle.
D) A and B.
Answer --> D

1345) Which of the following statements is not true?
A) When water turns to steam in the upper layer of hot smoke and fire gases, the upper layer tends to expand rather than shrink.
B) As water vapor rises, the hot gases are cooled and the upper layer contracts.
C) Cooling the upper layer requires vaporizing the water while it passes through the hot gases.
D) When water is directed into the hot upper layer of fire gases, the total amount of steam increases and fills the room with a mixture of hot smoke and steam, thus the upper layer of smoke expands downward.
Answer --> A

When water turns to steam in the upper layer of hot smoke and fire gases, the upper layer tends to shrink rather than expand.
All Chapters

1346) The stream of water or other water–based extinguishing agent after it leaves the fire hose and nozzle until it reaches the desired point is called a

A) Hose spray.
B) Hose stream.
C) Fire stream.
D) Fire spray.

Answer --> C


1347) The minimum flow rate at which extinguishment can be achieved in a fire is call the –

A) Decisive flow rate.
B) Essential flow rate.
C) Primary flow rate.
D) Critical flow rate.

Answer --> D


1348) The velocity pressure at which water is discharged from a nozzle is called the –

A) Nozzle velocity.
B) Nozzle pressure.
C) Fire stream pressure.
D) Hoseline pressure.

Answer --> B


1349) The fire stream of finely divided particles use for fire control is called a –

A) Broken stream.
B) Smooth stream.
C) Solid stream.
D) Fog stream.

Answer --> D

1350) An adjustable pattern nozzle equipped with a shut off control device is called a –

A) Combination nozzle.
B) Fog nozzle.
C) Smooth-bore nozzle.
D) All the above.

Answer --> B


1351) A semi-solid stream that is produced by a fog nozzle is called a –

A) Broken stream.
B) Fog stream.
C) Straight stream.
D) Semi-solid stream.

Answer --> C


1352) What is the NFPA Standard for Fire Hose Connections (2009)?

A) NFPA 1961.
B) NFPA 1962.
C) NFPA 1963.
D) NFPA 1964.

Answer --> C


1353) A large-caliber water stream usually supplied by combining two or more hoselines into a manifold device or by fix piping that delivers 350 gallons per minute or more is called a –

A) Master stream.
B) Deck stream.
C) Blitz stream.
D) All the above.

Answer --> A

1354) On smooth bore nozzles, the purpose of the short, cylindrical section is to –
A) Increase the reach of the hose stream.
B) Increase the pressure of the hose stream.
C) Give the water its round shape before discharge.
D) Deliver the maximum gallons per minute at the tip.

Answer -->  C


1355) A smooth bore nozzle tip should not be any larger than ___ the diameter of the hose.
A) 1/4.
B) 1/2.
C) 5/8.
D) 3/4.

Answer -->  B


1356) When smooth bore nozzles are used on handlines, they are usually operated at what pressure?
A) 50 psi.
B) 100 psi.
C) 150 psi.
D) 200 psi.

Answer -->  A


1357) The flow rate from smooth bore nozzles depends on –
A) The velocity of the stream resulting from the pump pressure.
B) The size of an nozzle orifice.
C) The length of the hoseline.
D) A and B.

Answer -->  D

1358) An adjustable pattern fog nozzle in which the rated discharge is delivered at a designated nozzle pressure and nozzle setting is called –

A) Basic fog nozzle. 
B) Constant gallonage fog nozzle. 
C) Constant pressure (automatic fog) nozzle. 
D) Constant/select gallonage fog nozzle. 

Answer --> A


1359) A constant discharge rate fog nozzle with a feature that allows manual adjustment of the orifice to effect a predetermined discharge rate well the nozzle is flowing is called a –

A) Basic fog nozzle. 
B) Constant gallonage fog nozzle. 
C) Constant pressure (automatic fog) nozzle. 
D) Constant/select gallonage fog nozzle. 

Answer --> D


1360) An adjustable pattern fog nozzle that discharges a constant discharge rate throughout the range of patterns from a straight stream to a wide fog at a designated nozzle pressure is called a –

A) Basic fog nozzle. 
B) Constant gallonage fog nozzle. 
C) Constant pressure (automatic fog) nozzle. 
D) Constant/select gallonage fog nozzle. 

Answer --> B


1361) An adjustable pattern fog nozzle in which the pressure remains relatively constant through a range of discharge rates is called a –

A) Basic fog nozzle. 
B) Constant gallonage fog nozzle. 
C) Constant pressure (automatic fog) nozzle. 
D) Constant/select gallonage fog nozzle. 

Answer --> C

1362) Why should firefighters avoid abrupt changes in the reaction force of a hoseline?

A) May increase friction loss.
B) May create a water hammer.
C) May disrupt the thermal layer.
D) May throw firefighters off-balance.

Answer --> D


1363) Automatic fog nozzles for hoselines are designed for which of the following flow rates?

A) Low flows such as 10 gpm to 125 gpm.
B) Mid-range flows such as 70 gpm to 200 gpm.
C) High flows such as 70 gpm to 350 gpm.
D) All the above.

Answer --> D


1364) Automatic master stream fog nozzles are typically designed to flow between –

A) 125 gpm to 200 gpm.
B) 200 gpm to 450 gpm.
C) 250 gpm to 550 gpm.
D) 350 gpm to 1250 gpm.

Answer --> D


1365) The designed operating pressure for most fog nozzles is –

A) 50 psi.
B) 75 psi.
C) 100 psi.
D) 125 psi.

Answer --> C

1366) The nozzle that consists of a rotating head with multiple outlets that distribute water in a circular pattern is called a –

A) Cellar nozzle.
B) Piercing nozzle.
C) Garbage nozzle.
D) Broken stream nozzle.

Answer -->  A


1367) The nozzle that is used to access fires in concealed places is called a –

A) Cellar nozzle.
B) Piercing nozzle.
C) Garbage nozzle.
D) Broken stream nozzle.

Answer -->  B


1368) The counterforce directed against a person holding a nozzle or a device holding a nozzle by the velocity of water being discharged is known as –

A) Nozzle reaction.
B) Nozzle kickback.
C) Nozzle force.
D) Hose stream reaction.

Answer -->  A


1369) Who is responsible for determining the strategy and tactics for controlling a structure fire?

A) The incident commander (IC).
B) The Chief of the department.
C) The first arriving officer.
D) The first arriving firefighter.

Answer -->  A

1370) All the following skills would be considered Firefighter I except for –

A) Suppression of Class B fuels.
B) Suppression of vehicle fires.
C) Suppression of structure fires.
D) Suppression of Class D materials.

Answer --> A


1371) Which statement regarding structure fire attack lines is NOT true?

A) Firefighters should stay low while entering the structure.
B) Any burning fascia, boxed cornices, or other doorway overhanging should be extinguished before entering the structure.
C) Fire attack line deployment must be coordinated with ventilation in order to improve visibility and to make more accurate assessments of fire conditions.
D) Attack lines should advance from the unburned side of the fire to keep from spreading the fire through the structure.

Answer --> D


Answer change from last version. The traditional answer was to attack the fire on the unburned side. This is no longer considered true. Wind creates airflow patterns within a structure that directly increase fire expansion and firefighter casualties. You want the wind at your back.

1372) Just before entering a burning building, the nozzle firefighter should do all of the following except –

A) Bleed the air out of the hoseline.
B) Set the nozzle to the correct pattern.
C) Extinguish any burning materials near the entrance of the building.
D) Set up a water curtain to protect any threatened exposures.

Answer --> D

1373) The offensive strategy used in fighting structure fires usually means deploying resources for interior tactical operations to accomplish incident priorities. Which of the following factors will help determine the tactics used during an offensive strategy?

A) Value.  
B) Time.  
C) Size.  
D) All the above.

Answer --> D


1374) Which of the following factors used during an offensive strategy would include tactical flow rates need it to control the fire, available resources, and fire conditions?

A) Value.  
B) Time.  
C) Size.  
D) Hazards.

Answer --> C


1375) Which of the following factors regarding a defensive strategy is incorrect?

A) The property is not salvageable.  
B) Sufficient resources are not available for an offensive strategy.  
C) There is a danger of structural collapse.  
D) A threat to occupant life exists.

Answer --> D


The correct factor would be no threat to occupant life exists, and no occupants are savable. Another factor would be that an offensive strategy would endanger the lives of firefighters, because of hazardous conditions that exist at the scene.

1376) What is the primary intention of a defensive strategy?

A) To enter the building as quickly as possible and put hoselines between trapped occupants and the fire.  
B) To establish lost control (Salvage) at the same time as conducting fire suppression operations.  
C) To isolate or stabilize an incident and keep it from expanding.  
D) To conduct fire suppression operations from the outside of the building until proper ventilation can be accomplished.

Answer --> C

1377) Defensive operations are employed when which of the following conditions are present?

A) There's an excessive volume of fire.
B) There is structural deterioration.
C) The risk outweighs the benefit.
D) All the above.

Answer --> D


Also included would be unfavorable wind conditions.

1378) Booster lines should not be used for fire suppression in which of the following situations?

A) Dumpster fires.
B) Brush fires.
C) Small structure fires.
D) Chimney fires.

Answer --> C


1379) Hoseline selection depends on all of the following fire conditions except –

A) The age of the building.
B) The volume of water needed to extinguish the fire.
C) The number of firefighters available to handle the hoseline.
D) The reach needed to extinguish the fire.

Answer --> A


Answer change from last version. Old answer was ... The size of the building.

Also involved are – The fire loading material involved, the need for speed and mobility, the size of the building, tactical requirements, ease of hoseline deployment, potential fire spread, size of the fire area, and location of the fire.
1380) When water is applied in short bursts directly into the burning fuels, firefighters are said to be implementing a(an) –

A) Direct attack.
B) Indirect attack.
C) Combination attack.
D) Ventilation attack.

Answer --> A


1381) When firefighters are unable to enter a burning structure and water is applied using a straight stream or narrow fog, firefighters are said to be implementing a(an) –

A) Direct attack.
B) Indirect attack.
C) Combination attack.
D) Ventilation attack.

Answer --> B


1382) What is meant by the term, "shielded fire?"

A) A fire burning in a fire proof container that has little chance of spreading.
B) A fire that generates so much radiant heat that launching any kind of direct attack is nearly impossible.
C) A fire that cannot be seen from a doorway because objects in the room are obstructing its view.
D) A fire attack in which the nozzle is set to a wide fog pattern for the purpose of creating a water curtain that shields firefighters from the heat.

Answer --> C


1383) Hot gas layers accumulating in the upper levels of a compartment may transition to __ at any time.

A) Rollover.
B) Flashover.
C) Smoke explosion.
D) All the above.

Answer --> D


Firefighters should always remember that smoke is fuel.
1384) With the nozzle set to a 40 to 60 degree fog pattern, and applying short bursts of water at 1 to 2 second intervals would be an example of –

A) Thermal layer disruption.
B) Gas cooling.
C) Stratified cooling.
D) Thermal obstruction.

Answer --> B


1385) Applying water to smoke that is not heated will cause which of the following to happen?

A) It will quickly aid in darkening down the fire.
B) It will create steam thus aiding in the extinguishment of the fire.
C) It will cause the fire to flare up.
D) It will cause unnecessary water damage and disrupt the thermal layer which has a tendency to decrease visibility if ventilation has not been accomplished.

Answer --> D


Answer was revised for this new edition.

1386) Which of the following hoselines would firefighters select if a 50 to 100 foot reach was required?

A) 1 1/2 inch hoseline.
B) 1 3/4 inch hoseline.
C) 2 inch hoseline.
D) 2 1/2 inch hoseline.

Answer --> D


1387) Which of the following situations is contraindicated for utilizing a Master Stream?

A) When the size of the fire has gone beyond the reach, flow, or penetration of handlines.
B) When water resources are in short supply, and personnel are ample.
C) When massive runoff of residual water can be allowed.
D) When interior attack of the fire can no longer be maintained.

Answer --> B


Master streams should be used when there is an ample water supply, but personnel are limited.
1388) Which hoseline offers 'good' mobility?

A) 1 1/2 inch hoselines.
B) 2 inch hoselines.
C) 2 1/2 inch hoselines.
D) Master streams.

Answer --> A

Exception – Aerial Master Streams can offer good mobility.

1389) Which method of fire suppression uses the steam-generating technique of ceiling-level attack to extinguish a fire?

A) Direct attack.
B) Indirect attack.
C) Combination attack.
D) B and C

Answer --> D


1390) The transition from offensive fire attack to defensive fire attack occurs when –

A) It is confirmed that all occupants have been rescued or it left the building on their own power.
B) Conditions in the structure deteriorate rapidly and unexpectedly.
C) When there's a lack of personnel or other resources at the scene.
D) When occupants have been spotted within the structure.

Answer --> B


1391) All the following statements regarding changing a fire attack from offensive to defensive is true except for –

A) All personnel must be made aware of the transition.
B) The incident commander should order a personnel accountability report.
C) All hoselines operating within the structure should be abandoned.
D) Some units may need to stay in place to protect egress and withdrawal of other units.

Answer --> C


Hoseline should not be abandoned unless absolutely necessary. When you abandon a hoseline, you cannot use it to protect yourself during the evacuation.
1392) Which of the following would NOT be considered one of the four main uses of a master stream?

A) Direct fire attack.
B) Supplementing handlines that are already attacking the fire from the exterior.
C) To protect exposures.
D) To assist in hydraulic ventilation operations.

Answer --> D


Also included would be indirect fire attack.

1393) One important aspect regarding the placement of master streams is the angle in which the stream enters the structure. Which of the following angles would be considered most effective?

A) At an upward angle, directed towards the ceiling.
B) At a horizontal angle midway between the floor and the ceiling.
C) At a downward angle, directed towards the floor.
D) Does not matter as long as the master stream is directed towards the base of the fire.

Answer --> A


1394) Why is it important that firefighters avoid operating master streams at too low of an angle?

A) They may lose control of the master stream device or hoseline.
B) It is ineffective to operate master streams at low angles.
C) It reduces the volume of water that can be pumped to the nozzle.
D) It reduces the pressure of the stream at the nozzle.

Answer --> A


1395) Typically, it is not practical to supply master streams with anything less than –

A) One 2 1/2 inch hoseline.
B) Two 2 1/2 inch hoselines.
C) One 3 inch hoseline.
D) One 4 inch hoseline.

Answer --> B

1396) It takes a minimum of ___ firefighters to deploy a master stream.

A) 1  
B) 2  
C) 3  
D) 4  

Answer --> B


1397) In a wildland fire which of the following fuels would involve roots, peat, and other partially decomposed organic matter?

A) Subsurface fuels.  
B) Surface fuels.  
C) Wildland fuels.  
D) Aerial fuels.

Answer --> A


1398) The compass direction a slope faces is often called the slope's –

A) Location.  
B) Exposure.  
C) Aspect.  
D) Origin.

Answer --> C


1399) Natural gas in its pure form is –

A) Propane.  
B) Ethane.  
C) Methane.  
D) Butane.

Answer --> C

1400) You are called to a scene of a lumber yard where a fork lift is leaking gas from its LPG tank inside a barn. A waitress from a restaurant next door runs out screaming that natural gas is leaking from the kitchen stove. As a firefighter where would you expect the gas from both the stove and the fork lift to accumulate?

A) The gas from the stove would rise to the highest point, and the gas from the fork lift would accumulate at the lowest point in the room.
B) The gas from the stove would accumulate at the lowest point and the gas from the fork lift would rise to the highest point in the room.
C) The gas from the stove and from the fork lift would both rise to the highest point in the room.
D) The gas from the stove and from the fork lift both would accumulate at the lowest point in the room.

Answer --> A


Natural gas is lighter than air and therefore will rise. The gas used in the fork lift is LPG and is heavier than air.

1401) Natural gas is explosive at concentrations of –

A) 1 – 5 %.
B) 5 – 15 %.
C) 15 – 20 %.
D) 20 – 25 %.

Answer --> B


Question left in for reference.

1402) LPG (liquefied petroleum gas) becomes explosive in concentrations between –

A) 1.5 – 10 %.
B) 10 – 20 %.
C) 20 – 30 %.
D) 30 – 35 %.

Answer --> A

1403) The best method for suppressing Class C fires is to –

A) Apply water by lofting a fog spray over a long distance.
B) Use a Class C foam.
C) Use a Class A foam.
D) Stop the flow of electricity before commencing suppression activities.

Answer --->  D


1404) What gives Natural Gas its distinctive odor?

A) Methane.
B) Ethane.
C) Propane.
D) Mercaptan.

Answer --->  D


1405) LPG expands rapidly when heated, ____ times for every 10 degrees of increase in temperature.

A) 1.0.
B) 1.5.
C) 2.0.
D) 2.5.

Answer --->  B


1406) A firefighter's first concern when arriving at a incident involving CNG or LPG distribution systems includes all of the following except –

A) Immediately extinguish the flames if the gas is burning.
B) Evacuate the area immediately around the break.
C) Evacuate the area downwind from the break.
D) Eliminate the ignition source.

Answer --->  A


If fire is visible, allow the fuel to burn itself out.
1407) Fires involving computer equipment are best controlled using –

A) Dry chemical extinguishers.
B) Halotron extinguishing agents.
C) CO2 extinguishers.
D) Dry powder extinguishers.

Answer --> B


1408) The primary danger to firefighters regarding electrical fires is

A) Arcing wires on the ground.
B) Ultraviolet burns to the eyes by looking at the arc.
C) Cardiac and respiratory arrest.
D) Failure to recognize that a hazard exists.

Answer --> D


1409) Fires involving downed transformers are best left up to qualified utility personnel. If firefighters have to extinguish a downed transformer the best means of extinguishment is –

A) A dry chemical extinguisher.
B) High expansion foam.
C) Halotron.
D) CO2.

Answer --> A


This applies to transformer fires when the transformer is still attached to the pole. If the transformer is a ground level you can either use of carbon dioxide extinguisher or dry chemical to extinguish the fire.

1410) Firefighters should control the power source at residential structure fires by –

(1) Pulling the meter  (2) Pulling the main breaker switch  (3) Removing fuses

A) (1) or (3) only.
B) (1) or (2) only.
C) (2) or (3) only.
D) (1), (2) or (3).

Answer --> C

1411) The primary reason not to apply water to Class C fires is because it –

A) Has little effect.  
B) Can damage electrical equipment.  
C) Creates a hazard for the firefighter because it conducts electricity.  
D) Produces toxic smoke and fumes.  

Answer -->  C  


1412) How can a firefighter tell if a downed power line is dead?  

A) If the line is broken.  
B) If the line is not arcing.  
C) If bystanders tell you the line is dead.  
D) There is no way of telling. Firefighters should assume that all downed power lines are live.  

Answer -->  D  


1413) When should firefighters enter a utility vault?  

A) To make repairs.  
B) To extinguish a fire.  
C) To attempt a rescue.  
D) Only after a qualified person has shut off the power.  

Answer -->  D  


CodeRQ  

Answer change from last version. Old answer was only to attempt a rescue. If firefighters must enter a utility vault, it should only be done so by personnel trained in confined space entry.  

1414) Which of the following is not a factor affecting the seriousness of an electrical shock?  

A) The path the electricity takes through the body.  
B) The height of the individual.  
C) The length of exposure.  
D) The frequency AC or DC.  

Answer -->  B  


Also other factors include, the degree of skin resistance, the available current, and also the available voltage.
1415) If a firefighter MUST leave a potentially charged apparatus the firefighter should –

A) Test to see if the ground is energized by placing one foot on the ground and trying to detect a tingling in his/her foot.
B) Hold on to the apparatus and jump making sure both feet land on the ground at the same time.
C) Jump clear of the apparatus (keeping feet together) making sure that the firefighter does not come in contact with the ground and the apparatus at the same time.
D) Firefighters should never leave potentially charged vehicles.

Answer -->  C


 Normally, firefighters should remain inside a vehicle or apparatus that is in contact with power lines.

1416) You arrive at the scene of a downed power line. The position of the break is midway between the two utility poles. Where should the exclusion zone be established?

A) 50 feet in all directions.
B) 100 feet in all directions.
C) Between the two poles closest to the break.
D) Should extend one pole beyond the two utility poles closest to the break on each side, and all directions.

Answer -->  D


1417) If a power line falls onto a fence or metal guardrail, how much of the fence should be considered energized?

A) 50 feet in either direction from where the wire touches the fence.
B) 100 feet in either direction from where the wire touches the fence.
C) 150 feet in either direction from where the wire touches the fence.
D) The entire length of the fence or guardrail should be considered energized.

Answer -->  D


1418) The only fire stream that is recommended to be used around electrical equipment is a __ with at least __ of nozzle pressure.

A) Straight stream, 250 psi.
B) Fog stream, 250 psi.
C) Solid stream, 100 psi.
D) Fog stream, 100 psi.

Answer -->  D


Do not use solid or straight streams on fires involving electrical equipment.
1419) What is meant by 'ground gradient'?

A) The angle of the slope of the ground that can effect the rate in which a flammable liquid can spread.
B) The polarization of light by the ground that forms a mirage on the pavement. i.e. Looks like puddles of water on the road.
C) The tendency of an energized electrical conductor to pass a current along the path of least resistance to the ground.
D) The overall makeup of the ground surface. Smooth ground surfaces contribute to the spread of hazardous fuel spills, while rough ground surfaces increase absorption, but offer better containment.

Answer --> C


1420) Which statement regarding extinguishment of Class D fires is NOT true?

A) Class D fires burn at extremely high temperatures and are reactive to water.
B) Water is only effective as an extinguishing agent if it is applied in sufficient volumes to lower the ignition temperature of the metal.
C) Directing hose streams at burning metal can lead to violent decomposition of the water and can release hydrogen gas.
D) Once an ash layer covers the burning metal, firefighters can safely assume the fire has burned itself out.

Answer --> D


Even though there may not be any visible flames, don't assume the fire is out. It may be an extended period of time before the substance is cool to safe levels.

1421) Fire attack during interior operations must be coordinated with which of the following?

(1) Forcible entry. (2) Search and rescue operations. (3) Ventilation. (4) Control of utilities.

A) 1, 3, 4.
B) 1, 2, 3.
C) 3, 4.
D) 1, 2, 3, 4.

Answer --> D

1422) Typically, fire attack in high rise buildings is usually initiated –

A) On the floor above the fire floor.
B) On the floor below the fire floor.
C) Two floors below the fire floor.
D) On the same floor as the fire.

Answer --> B


1423) When fighting basement fires that have no basement windows, where should ventilation be located?

A) The stairway to the basement should be used for ventilation.
B) A ventilation hole should be cut as close to the stairway as possible.
C) A ventilation hole should be cut on the ground floor near a window.
D) The foundation of the building should be breached to create a ventilation opening.

Answer --> C


The window is then opened allowing for smoke and hot fire gases to escape.

1424) Hose of 3/4 inch to 2 inches in diameter used for firefighting purposes is called –

A) Small-diameter hose.
B) Small line.
C) Garbage line.
D) A and B.

Answer --> D


NTQ

1425) Firefighters should be aware that unprotected steel beams elongate if exposed to temperatures above –

A) 300 degrees F.
B) 500 degrees F.
C) 800 degrees F.
D) 1000 degrees F.

Answer --> D

1426) The typical attack line for suppressing vehicle fires should be at least –
A) Booster line
B) 1 1/2 inch hose.
C) 2 inch hose.
D) 2 1/2 inch hose.
Answer --> B


1427) Whenever possible fire apparatus should park __ from a vehicle fire.
(1) Uphill (2) Upwind (3) Downhill (4) Downwind
A) 1, 2.
B) 1, 3.
C) 2, 4.
D) 2, 3.
Answer --> A


1428) Firefighter Jon says that firefighters should extinguish any fire near the vehicle occupants first.
Firefighter Kevin says a hoseline should be placed between the vehicle fire and any exposures.
Who is correct?
A) Firefighter Jon
B) Firefighter Kevin.
C) Both are correct.
D) Both are incorrect.
Answer --> C


1429) Which method should be used to extinguish vehicle undercarriage fires?
A) A straight stream deployed from a distance is able to reach under the vehicle.
B) A straight stream a close proximity, deflected off the pavement.
C) Directing the stream through an opened engine compartment to the undercarriage of the vehicle.
D) All the above.
Answer --> D

1430) When sealed components of motor vehicles become heated, the gases inside them expand. If the component fails, projectiles can be launched at great speeds, representing a potential safety hazard to firefighters. All of the following are a potential risk of launching projectiles except –

A) Shock-absorber type bumpers.
B) Hollow driveshafts.
C) Catalytic converters.
D) Hatchback supports.

Answer --> C


1431) Which of the following would represent a critical function served by backup hoselines?

(1) Protecting the attack hoseline team from extreme fire behavior. (2) Protecting the means of egress for the attack hoseline team. (3) Providing additional fire suppression capability in the event that the fire increases in volume.

A) 1.
B) 1, 2.
C) 2, 3.
D) 1, 2, 3.

Answer --> D


1432) A backup hoseline should be –

A) At least the same size and provide the same fire flow as the attack hoseline.
B) Twice the diameter of the attack hoseline.
C) Smaller than the attack hoseline in order to conserve the water supply.
D) Of any size hoseline as long as the fire flow remains the same as the attack hoseline.

Answer --> A

1433) Which of the following factors will dictate nozzle and stream selection?

(1) Fire conditions.  (2) Available water supply.  (3) The ambient temperature and relative humidity of the scene.  (4) The number of firefighters available to safely operate the hoseline.  (5) The capabilities of the nozzle being used.

A) 1, 2, 3, 4.  
B) 2, 3, 4, 5.  
C) 1, 2, 4, 5.  
D) 1, 3, 4, 5.

Answer -->  C


1434) For interior fire attack, which of the following generally is the most useful nozzle?

A) Broken stream nozzle.  
B) Fog nozzle.  
C) Straight stream nozzle.  
D) Piercing nozzle.

Answer -->  B


1435) Ground cover fires are fires that involve all of the following except –

A) Brush.  
B) Crops.  
C) Trash receptacles.  
D) Forests.

Answer -->  C


1436) All of the following are factors that affect wildland fire behavior except –

A) Time of day.  
B) Weather.  
C) Fuel.  
D) Topography.

Answer -->  A

1437) In wildland fires, fuels are often classified by grouping together materials with similar burning characteristics. When considering this, what fuel classification would you assign to living surface vegetation such as grass or brush, and nonliving surface vegetation such as logs and heavy limbs?

A) Subsurface fuels.  
B) Surface fuels.  
C) Aerial fuels.  
D) Suspended fuels.

Answer -->  B


Brush up to 6 feet in height would also be included.

1438) All the following would be considered the three basic types of ground cover fires based on the type and location of the fuel except for –

A) Ground fires.  
B) Surface fires.  
C) Crown fires.  
D) Suspended fires.

Answer -->  D


1439) Aerial fuels are fuels –

A) That are suspended, or upright fuels that are physically separated from the ground.  
B) Small twigs or leaves on the ground.  
C) Decomposing pine needles in the ground.  
D) Any low vegetation living or dead.

Answer -->  A


This would include brush over 6 feet tall.

1440) How would you expect the continuity of a fuel in a wildland fire to affect the burning characteristics of the fuel itself?

A) Patchy fuels will spread at a faster rate than fuels that are close together.  
B) Fuels that are close together will spread at a faster rate.  
C) The continuity of the fuel does not play a role in the rate a wildland fire will burn.  
D) Continuity of the fuel effects the fuels burning characteristics only if it also is affected by weather and volume.

Answer -->  B


Because the fuels are close together the fire will spread at a faster rate because of heat transfer. Patchy fuels will spread slower because they lack the heat transfer factor.
1441) Firefighter Ed says that small or light fuels burn faster than larger and heavier fuels. Firefighter Ellen says that tightly compacted fuels burn faster than aerial fuels. Firefighter Elizabeth says that the amount of fuel present in a given area influences a fire's intensity. Who is correct?

A) Firefighter Ed.
B) Firefighter Ellen.
C) Firefighter Ed and Elizabeth.
D) They all are correct.

Answer --> C


Tightly compacted fuels such as hay bales will burn slower than those loosely piled.

1442) All of the following aspects of weather have an effect upon wildland fire behavior except -

A) Wind.
B) Temperature.
C) Barometric pressure.
D) Relative humidity.

Answer --> C


Precipitation also has an obvious effect on wild land fires.

1443) Which statement regarding topography and wildland fires is true?

A) Fire will move faster downhill than uphill.
B) Fire will move faster uphill than downhill.
C) The steeper the grade of a slope, the slower the fire will spread.
D) Ridges, trees, and rock outcroppings prevent erratic fire behavior.

Answer --> B


1444) North of the equator, wildland fires will typically burn faster on __ exposures.

A) Northern.
B) Southern.
C) Eastern.
D) Western.

Answer --> B


Southern exposures typically receive most of the sun's direct rays and therefore receive more heat.
1445) Which part of a wildland fire spreads most rapidly?

A) Head.
B) Finger.
C) Origin.
D) Perimeter.

Answer --> A


1446) The sides of a wildland fire are called the –

A) Fingers.
B) Perimeters.
C) Flanks.
D) Spot fires.

Answer --> C


1447) Long narrow strips extending out from the main fire are called –

A) Heads.
B) Fingers.
C) Spot fires.
D) Heels.

Answer --> B


1448) Fires caused by flying sparks or embers landing outside the main fire are called –

A) Island fires.
B) Spot fires.
C) Spark fires.
D) Finger fires.

Answer --> B

1449) Unburned areas inside the fire perimeter are called –
A) Islands.
B) The Green.
C) The Black.
D) The Green fingers.
Answer -->  A


1450) The area where a wildland fire starts and the point from which it spreads is called the –
A) Source.
B) Origin.
C) Heel.
D) Point of ignition (POI).
Answer -->  B


1451) When firefighters try to extinguish wildland fires by cutting the progress of the fire, by the process of removing fuels, they are said to be fighting the fire using a(an) –
A) Direct attack.
B) Indirect attack.
C) Perimeter attack.
D) Flank attack.
Answer -->  B


1452) When firefighters try to extinguish wildland fires by extinguishing the fire's flames, they are said to be fighting the fire using a(an) –
A) Direct attack.
B) Indirect attack.
C) Perimeter attack.
D) Flank attack.
Answer -->  A

1453) The main objective in attacking wildland fires is to –

A) Attack the Head first.
B) Attack from the Heel side.
C) Attack from the flanks.
D) Establish a control line that completely encircles the fire, and rendering all fuel within the zone harmless.

Answer -->  D


1454) Which of the following is NOT one of the Ten Standard Fire Fighting Orders?

A) Ensure adequate water supply.
B) Ensure instructions are given and understood.
C) Retain control at all times.
D) Recognize current weather conditions and obtain forecasts.

Answer -->  A


1455) One of the best ways to control basement fires without deploying personnel directly to the basement is with –

A) Master stream deck guns.
B) Handlines attacking from the floor above the fire, via the basement stairs.
C) A hole is cut in the floor just above the fire, and a cellar nozzle is inserted to extinguish the fire.
D) High expansion foam through a window or door.

Answer -->  C


1456) The term used to describe when firefighters becomes so focused on fire fighting or other operational assignments that they fail to sense changes in the environment is called –

A) Pre-occupational awareness.
B) Situational awareness.
C) Freelancing.
D) Tunnel vision.

Answer -->  D

1457) The term used to describe when firefighters have an active, and conscious knowledge of a situation or environment around them during an emergency incident is called –

A) Pre-occupational awareness.
B) Situational awareness.
C) Freelancing.
D) Operational awareness.

Answer -->  B


Look up, look down, look all around.

1458) Approaches to storage vessels exposed to fire should be made –

A) From the ends of the vessel.
B) At right angles to the vessels.
C) At a 45-degree angle from the vessels.
D) At any of the above.

Answer -->  C


The approach should never be made from the ends or at right angles to the vessels.

1459) Serious hazards can arise with explosions caused by short-circuit arcing or blown fuses that may ignite accumulated gases. In these situations firefighters should keep the public back at least –

A) 300 ft.
B) 500 ft.
C) 1000 ft.
D) 1500 ft.

Answer -->  A


1460) What should firefighters do if they encounter a Class D fire and do not have on hand any Class D extinguishing agents?

A) Direct a 30 degree fog stream towards the fire.
B) Use a 2 1/2 inch hoseline with a straight stream directed at the base of the fire.
C) Use a master stream appliance to control the Class D fire.
D) Protect exposures and allow the metal to burn out.

Answer -->  D

1461) To aggressively attack a structure fire from the exterior with large diameter fire streams is call a –

A) Aggressive attack.  
B) Offensive attack.  
C) Strike attack.  
D) Blitz attack.  

Answer -->  D


1462) What is the minimum number of firefighters that can be used in a RIC?

A) 1.  
B) 2.  
C) 3.  
D) 4.  

Answer -->  B


1463) Some fire departments allow freight elevators to be used to transport fire fighting equipment to staging areas in multistory buildings. Where should these staging areas be located?

A) On the fire floor.  
B) On the floor just below the fire floor.  
C) Two floors below the fire floor.  
D) One floor above the fire floor.  

Answer -->  C


1464) Which of the following dictates the number of personnel required to advance a hoseline and operate the nozzle within the confines of a structure?

A) The number of lengths of hose used.  
B) The diameter of the hoseline.  
C) The nozzle reaction.  
D) The relative size of the fire.  

Answer -->  C


The greater the nozzle reaction, the more firefighters you will need.
1465) One of the greatest possible hazards that are ever–present at trash container fires is –

A) The strong possibility of fire spread.
B) The strong possibility the fire will rage out of control.
C) The possible exposure to toxic products of combustion.
D) The inability to protect exposures.

Answer --> C


Always wear full PPE and SCBA at trash container fires.

1466) Small trees on or immediately adjacent to the surface of the ground would be considered –

A) Subsurface fuels.
B) Surface fuels.
C) Aerial fuels.
D) Raised fuels.

Answer --> B


1467) The amount of fuel present in a given area that influences the fire's intensity and the amount of water needed to achieve extinguishment would be considered its –

A) Mass.
B) Area.
C) Perimeter.
D) Volume.

Answer --> D


1468) Which of the following largely determines the moisture content of live fuels?

A) Precipitation.
B) Relative humidity.
C) Dew point.
D) Temperature.

Answer --> A

1469) The outside boundary, or the distance around the outside edge of a wild land fire is called the –

A) Edge.
B) Area.
C) Flanks
D) Perimeter.

Answer -->  D

Also called the fire edge.

1470) The side of the fire opposite from the head is called the –

A) Heel.
B) Rear.
C) Black.
D) A and B.

Answer -->  D


1471) Unburned fuels at the scene of a wildland fire located next to involved areas are called the –

A) Green.
B) White.
C) Red.
D) Black.

Answer -->  A


1472) The area of a wildland fire where fuels have been consumed is called the –

A) Red.
B) Yellow.
C) Hot.
D) Black.

Answer -->  D


All Chapters
1473) What is the Standard on Protective Clothing and Equipment for Wildland Fire Fighting?

A) NFPA 1500.
B) NFPA 1977.
C) NFPA 1981.
D) NFPA 2100.

Answer --> B


1474) Which of the following would not be considered part of the equipment the NFPA Standard requires wildland firefighters to carry?

A) Helmet, eye protection and neck shroud.
B) Flame retardant jump suit, and fire shelter.
C) Protective footwear, and gloves.
D) Extra food and canteens of water.

Answer --> D


Although canteens and extra food is not part of the standard, most firefighters will carry such equipment.

Also, it is important to mention that the protective footwear should not have steel toes.

1475) For exterior fire attack, which of the following generally is the most useful nozzle?

A) Broken stream nozzle.
B) Fog nozzle.
C) Straight stream nozzle.
D) Piercing nozzle.

Answer --> C


1476) Which of the following factors should be taken into account when making a decision to enter a burning building?

A) What is the wind direction and velocity?
B) What is the condition of the building and the initial fire location?
C) Where are the occupants and what exposures should be considered?
D) All the above.

Answer --> D

1477) Before entering a burning building who should conduct a quick size-up and maintain a high level of situational awareness?

A) The incident commander.
B) The company officer leading the crew.
C) The firefighter on the nozzle.
D) Every member of the crew.

Answer --> D


1478) When does entry size-up of a burning building begin?

A) Prior to reaching the fire room.
B) Well before reaching the entry point.
C) Upon receipt of the alarm.
D) Upon arrival on the scene.

Answer --> B


General size-up of burning structures begins with preplanning. In this case we are talking about entry size-up only.

1479) When should you open the door to a fire room?

A) Only if you have a charged hose line and are ready to control the conditions you encounter.
B) Only if the roof has been ventilated by truck company crews.
C) Only if there is a backup line ready or RIT team standing by.
D) Never.

Answer --> A


1480) When you are at the door of a fire room with an attack hoseline in place, open the door slightly, apply water to the hot layered gases and then wait ____ to observe any reactions before entering the structure.

A) 2 to 5 seconds.
B) 5 to 10 seconds.
C) 10 to 15 seconds.
D) 15 to 20 seconds.

Answer --> B


Firefighter should also maintain control of the door as it is opened, and should place a rope hose tool or utility strap over the doorknob so it can be quickly pulled closed if necessary.
1481) When operating in multistory buildings, firefighters should always check for fire extension ____ before advancing the hoseline to the fire floor.

A) On the floor above the fire floor.
B) On the floor below the fire floor.
C) On the top floor.
D) On the ground or basement floor.

Answer -->  B


1482) Fires originating ____ are some of the most difficult and dangerous structure fires that you may encounter.

A) In basements or subfloors.
B) In high-rise buildings.
C) In two-story residential structures.
D) In buildings constructed of heavy timber (Type IV).

Answer -->  A


1483) Residential buildings have a variety of areas within the structure that can be converted to sleeping quarters. Which of the following situations would pose a high degree of life safety hazards not only for the occupants, but for firefighters as well?

A) Sleeping quarters in the attic.
B) Sleeping quarters in a converted garage.
C) Sleeping quarters in an unattached building.
D) Sleeping quarters in the basement.

Answer -->  D


1484) According to UL tests, which of the following practices is sufficient to ensure the integrity of a floor system above a basement fire?

A) Sounding the floor with a heavy tool.
B) Utilizing a thermal imager to examine the floor joists.
C) Feel the floor for sponginess.
D) None of the above tests are sufficient to ensure the integrity of the floor system above a basement fire.

Answer -->  D


Once the fire has been extinguished, a visual inspection of the floor joists should be made before personnel are permitted to work on the first floor.
1485) A structure or separate part of the fire ground to which fire could spread is called a(an) –

A) Exposure.
B) Threaten occupancy.
C) Risk target.
D) All the above.

Answer -->  A


1486) The most likely approach to exterior exposure protection is to –

A) Evacuate persons who are in the path of the fire.
B) Relocate park vehicles or railroad cars.
C) Use forklifts or heavy equipment to move piled storage.
D) Use water spray or foam extinguishing agents to place a protective cover on the exposure.

Answer -->  D


1487) Who is responsible for turning back on utilities after a fire incident?

A) The fire department safety officer.
B) The utility provider.
C) The incident commander.
D) The company officer assigned to that exposure.

Answer -->  B


Utility company personnel will have to determine if the building and the utility distribution system is safe before the services can be reestablished.

1488) The electric meter is the primary location for shutting off the power to a residence. If the lines are buried underground, where would you expect to find the meter box and shutoff?

A) On the side of the building.
B) In the basement of the structure where the utility line enters.
C) On the side of the pole where the line extends underground.
D) On top of the pole of the closest transformer.

Answer -->  C

1489) When shutting off the power to a residence, pull the handle on the side of the meter –

A) Up.
B) Down.
C) To the left.
D) To the right.

Answer -->  B


1490) Any voltage in excess of ____ is considered high-voltage.

A) 200 volts.
B) 400 volts.
C) 600 volts.
D) 800 volts.

Answer -->  C


1491) Any voltage that is less than 600 volts is considered to be –

A) Low voltage.
B) Light voltage.
C) Medium voltage.
D) Minimum voltage.

Answer -->  A


1492) Under which conditions will solar panels generate current?

A) When exposed to sunlight.
B) When exposed to sunlight or moonlight.
C) When exposed to sunlight or artificial lighting.
D) When exposed to sunlight, moonlight, or artificial lighting.

Answer -->  D


Solar panels generate current whenever there is any kind of light source.
1493) In cases where structures are powered by wind turbines, where would you turn off the power to make the building safe?

A) At the meter box with the main power shut off.
B) At the base of the wind turbine.
C) In the wind turbine control box usually located in the basement of the structure.
D) The power from wind turbines cannot be safely turned off.

Answer --> A


You should remember that although the power to the building maybe shut off at the meter box, the power line from the wind turbine to the meter will remained energized.

1494) Natural gas in its pure form is methane, and has a flammability range of –

A) 1 to 10%.
B) 5 to 15%.
C) 15 to 20%.
D) 10 to 20%.

Answer --> B


1495) Natural gas is –

(1) Non–toxic. (2) Lighter than air. (3) Moderately toxic. (4) Heavier than air.

A) 1, 2.
B) 1, 3.
C) 2, 3.
D) 3, 4.

Answer --> A


Although natural gas is non–toxic, it is classified as an asphyxiant because it may displace normal breathing air in a confined space and lead to suffocation.

1496) Natural gas has no odor on it's own, however ____ is added by the utility company, which causes a very distinctive sulfur–like odor, much like rotten eggs.

A) Sulfur dioxide.
B) Sulfur hydroxide.
C) Mercaptan.
D) Hydrosulfide.

Answer --> C

1497) Natural gas shut offs are in-line valves located on the owner supply side of the meter; that is between the distribution system and the meter. To close a valve firefighters should turn the tang –

A) Continuously counterclockwise until firmly closed.
B) Continuously clockwise until firmly closed.
C) Until it's 90 degrees to the pipe.
D) Until it's 45 degrees to the pipe.

Answer --> C


1498) To close a natural gas pipe valve, firefighters should use which of the following tools?

A) Spanner wrench.
B) Pipe wrench.
C) Adjustable wrench.
D) All the above.

Answer --> D


1499) Under which of the following conditions might you expect natural gas to lose its odorant, making it difficult to detect without the proper instruments?

A) When the natural gas leaks underground in wet soil.
B) When the ambient relative humidity is below 50%.
C) In a heavy rainstorm.
D) All the above.

Answer --> A


1500) Which of the following would be considered liquefied petroleum gases (LPG)?


A) 1, 4.
B) 2, 4.
C) 1, 2, 4.
D) 1, 2, 3, 4, and 5.

Answer --> A

1501) LPG gas is about –

A) 1 1/2 times lighter than air.
B) 1 1/2 times heavier than air.
C) Twice as heavy as air.
D) Twice as light as air.

Answer --> B


1502) LPG gas has an explosive range of –

A) 0.5 to 5 %.
B) 1.5 to 10 %.
C) 3 to 15 %.
D) 5 to 10 %.

Answer --> B


1503) One of the first priorities in a fire at a protected structure is to –

A) Connect the fire Department pumper to the closest fire hydrant.
B) Set up a relay pumping operation from the fire to the closest fire hydrant.
C) Initiate the protected structure's fire suppression units.
D) Connect the fire department pumper to the fire department connection (FDC).

Answer --> D


1504) Which of the following statements regarding shutting down a sprinkler system control valve is correct?

A) Shutting down a sprinkler system control valve should only be done once the fire has been brought under control.
B) The sprinkler system control valve can only be shut down on order from the incident commander.
C) Once the sprinkler system control valve has been shut down, a firefighter with a portable radio should be stationed at the control valve that has been closed so that the valve can be reopened if necessary.
D) All the above.

Answer --> D

1505) Which of the following valves has a yoke on the outside with a threaded stem that opens and closes the gate inside the valve housing?

A) Post-indicator valve (PIV).
B) Wall post indicator valve (WPIV).
C) Outside stem and yoke valve (OS&Y).
D) Post-indicator valve assembly (PIVA).

Answer --> C


1506) Which of the following valves has a metal post that houses the valve stem and a movable plate with the words OPEN or SHUT visible through a small glass window on the side of the housing?

A) Post-indicator valve (PIV).
B) Wall post indicator valve (WPIV).
C) Outside stem and yoke valve (OS&Y).
D) Post-indicator valve assembly (PIVA).

Answer --> A


1507) Which of the following valves does not use a plate with the words Open and Shut, but uses a circular disk inside a flat plate on the top of the valve housing?

A) Post-indicator valve (PIV).
B) Wall post indicator valve (WPIV).
C) Outside stem and yoke valve (OS&Y).
D) Post-indicator valve assembly (PIVA).

Answer --> D


When the valve is opened, the disc is perpendicular to the surrounding plate. When the valve is closed, the disc is in line with the plate that surrounds it.

1508) Which of the following valves is similar to a PIV except that it extends horizontally through a wall with the target and valve operating nut on the outside of the building?

A) Post-indicator valve (PIV).
B) Wall post indicator valve (WPIV).
C) Outside stem and yoke valve (OS&Y).
D) Post-indicator valve assembly (PIVA).

Answer --> B

1509) When operating master streams, firefighters should aim the stream so that it enters the structure –

A) At a downward angle causing it to deflect water off the floor of the fire room.
B) At an upward angle causing it to deflect off the ceiling or other overhead objects.
C) Perfectly horizontal so the stream reaches a back wall and deflects water equally to the ceiling and to the floor.
D) In back of firefighters who are conducting a direct attack within the fire room.

Answer -->  B


Never deploy a master stream while firefighters are actively operating on a direct attack within a structure.

1510) Master stream devices flow at a minimum of –

A) 350 gpm.
B) 400 gpm.
C) 450 gpm.
D) 500 gpm.

Answer -->  A


1511) Using water on energized equipment is inappropriate because any voltage greater than ___ is potentially dangerous.

A) 12 volts.
B) 24 volts.
C) 40 volts.
D) 50 volts.

Answer -->  C


1512) If water must be used to control energized equipment, it should be applied at a distance and in the form of a –

A) Fog stream.
B) Spray stream.
C) Straight stream.
D) A and B.

Answer -->  D

1513) A toxic compound found in some older oil-filled electrical transformers is called –

A) Trinitrotoluene.
B) Anhydrous ammonium sulfide.
C) Polychlorinated biphenyl.
D) Mineral oil.

Answer --> C


Abbreviated PCB.

1514) PCBs used in electrical transformers have been outlawed for years, however, firefighters should be aware that even transformers marked as containing no PCBs can legally contain up to –

A) 49 ppm.
B) 65 ppm.
C) 80 ppm.
D) 95 ppm.

Answer --> A


1515) The danger area in the proximity of a ground gradient may extend up to ____ from the downed power line.

A) 50 feet.
B) 75 feet.
C) 100 feet.
D) 150 feet.

Answer --> D


1516) What is the NFPA Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting?

A) NFPA 1971.
B) NFPA 1975.
C) NFPA 1976.
D) NFPA 1977.

Answer --> A

1517) Your first action upon arrival at a vehicle fire is to –

A) Establish a water supply.
B) Don personal protective equipment.
C) Size up the incident.
D) Stabilize the vehicle.

Answer -->  C


1518) At a vehicle fire, once you have sized up the incident your next task should be –

A) Establish scene safety around the vehicle.
B) Save the vehicle occupants.
C) Extinguish the fire.
D) Confirm the type of fuel used by the vehicle, and select the appropriate extinguishing agent.

Answer -->  A


Situational awareness is key at vehicle fires. You and your crew will not be safe if you focus on the fire itself and ignore the power lines that ignited the vehicle in the first place.

1519) How should you approach a vehicle which is on fire?

A) From the unburned side of the vehicle.
B) From the burned side of the vehicle.
C) At a 45 degree angle.
D) Downhill and downwind from the vehicle if possible.

Answer -->  C


1520) At a vehicle fire, how should you control burning metal?

A) With large amounts of water.
B) With a Class A foam.
C) With a Class D extinguishing agent.
D) With a Class K extinguishing agent.

Answer -->  C

1521) In vehicle fires, all the following would be considered extraordinary hazards except for –

A) A vehicle hauling sodium nitrate.
B) A vehicle with pressurize natural gas tanks.
C) A vehicle with large-capacity saddle fuel tanks.
D) A vehicle carrying radioactive materials such as medical isotopes.

Answer -->  A


Sodium nitrate is common table salt.

1522) In vehicle fires where the fire is limited to the trunk or engine compartment your first task is to –

A) Protect exposures around the vehicle.
B) Gain access to the engine compartment or trunk.
C) Cool the entire vehicle with a wide fog stream.
D) Gain access to these compartments through the cab of the vehicle.

Answer -->  B


1523) At vehicle fire is powered by alternative energy sources, how far should you park the apparatus away from the incident?

A) 50 feet.
B) 100 feet.
C) 125 feet.
D) 150 feet.

Answer -->  B


1524) At vehicle fires powered by alternative energy sources, you should consider and execute all the following except for –

A) Approach the vehicle from the uphill and upwind direction if possible.
B) Use non-sparking extrication tools.
C) Set out road flares to keep other vehicles at a safe distance.
D) Deploy a backup hoseline.

Answer -->  C


Do not use road flares.
1525) You are at an incident involving a vehicle powered by CNG with no visible fire. What should be your course of action?

A) Use a gas detector to locate leaks.
B) Use a gas detector to locate shutoff valves.
C) Eliminate any ignition source within the area.
D) All the above.

Answer --> D


Also, stay clear of any detected vapor clouds. CNG stands for compressed natural gas.

1526) What is the third most common vehicle fuel type?

A) Compressed natural gas (CNG).
B) Diesel.
C) Liquefied petroleum gas (LPG).
D) Electrical energy.

Answer --> C


1527) When considering electric or hybrid electric vehicles, you may find the batteries for these vehicles in all the following places except –

A) In the engine compartment.
B) In the trunk area.
C) Under the vehicle.
D) Under the passenger and/or drivers seats.

Answer --> D


1528) You arrive on-scene to an electric or hybrid electric vehicle fire where there is fire visible. What should be your next mode of operation?

A) Gain access to the compartment which is burning and extinguish the fire using 1 1/2 to 1 3/4 inch handlines and a wide fog pattern.
B) Direct an apparatus-mounted master stream onto the vehicle.
C) Direct a blanket of foam down on the vehicle using the rain down method.
D) Do not approach the vehicle, but rather establish scene safety and protect exposures.

Answer --> D


Never approach an electric vehicle that's on fire or there is arcing under the hood.
1529) Electric vehicles run solely on electricity stored in batteries, and firefighters can use inertia switches and pilot circuits to shut off the high-voltage system. How long will it take for energy in the system to dissipate?

A) 5 minutes.
B) 10 minutes.
C) 30 minutes.
D) Up to 1 hour.

Answer --> A


1530) In electric vehicles, what color are the high-voltage cables?

A) Yellow.
B) Orange.
C) Blue.
D) Black.

Answer --> B


There is still an electrocution hazard with blue and yellow color coded cables, but they do not carry high voltage. You should still never cut any orange, blue, or yellow color-coded electrical cables or components in electric or hybrid electric vehicles.

1531) Ethanol and methanol fires burn a bright _____ and may be hard to see during the day.

A) Orange.
B) Pink.
C) Blue.
D) Red.

Answer --> C


1532) What percentage of gasoline sold in the United States is an ethanol blend?

A) 25%.
B) 50%.
C) 65%.
D) 75%.

Answer --> B

1533) What extinguishing agent should you use on a vehicle powered by ethanol or methanol?

A) Water with a wetting agent additive.
B) Class A foam.
C) Dry chemical or carbon dioxide.
D) Alcohol Resistant Class B foam.

Answer --> D


1534) Biodiesel has a flashpoint of –

A) 150 degrees F.
B) 200 degrees F.
C) 266 degrees F.
D) 300 degrees F.

Answer --> C


1535) What should you used to extinguish a fire in a vehicle powered by biodiesel?

(1) Dry chemical.  (2) C02.  (3) Water fog spray. (4) Foam.

A) 1, 2.
B) 3, 4.
C) 1, 3, 4.
D) 1, 2, 3, 4.

Answer --> D


1536) What is the self-ignition temperature of hydrogen?

A) 266 degrees F.
B) 345 degrees F.
C) 419 degrees F.
D) 550 degrees F.

Answer --> D

1537) What is the flammability range of hydrogen?

A) 1 to 15%.
B) 2 to 55%.
C) 4 to 75%.
D) 5 to 80%.

Answer --> C


1538) How do you extinguish a fire in a vehicle powered by hydrogen?

A) Gain access to the compartment which is burning and extinguish the fire using 1 1/2 to 1 3/4 inch handlines and a wide fog pattern.
B) Direct an apparatus-mounted master stream onto the vehicle.
C) Direct a blanket of foam down on the vehicle using the rain down method.
D) You don't. Instead you protect exposures and allow the fuel to burn off

Answer --> D


1539) When operating at a scene involving a burning hydrogen-powered vehicle, if extrication is required, make sure you never cut the –

A) A posts.
B) B posts.
C) C posts.
D) D posts.

Answer --> C


The C posts contain the vents.

1540) All the following would be considered stacked and piled combustible materials except for –

A) Raw materials such as those found in sawmills, lumberyards, or manufacturing facilities.
B) Loose flammable materials, such as mulch or fertilizer, at nurseries or garden centers.
C) Bales of used cardboard or pallets near large retail outlets.
D) The contents of dumpsters.

Answer --> D

1541) Which of the following would you consider to be the greatest danger at incidents involving stacked or piled materials?

A) Exposures, primarily near structures and ground cover.
B) Toxic fumes from the burning materials.
C) The potential of explosion.
D) Radiant heat exposure to firefighters.

Answer --> A


Of course if the stacked material contains bags of chemical fertilizer, I would be worried about explosion.

1542) How does NFPA define or specify what constitutes a small structure?

A) Any structure that can be loaded onto the bed of a tractor-trailer truck and transported.
B) Any structure that lacks a permanent foundation.
C) Any structure not exceeding 1 story tall and not exceeding 10' x 20' in size.
D) NFPA does not define or specify what constitutes a small structure, only that a fire should be attacked from the exterior

Answer --> D


1543) Wind-driven, high intensity fires in the tree tops of heavily forested areas are known as –

A) Canopy fires.
B) Surface fires.
C) Crown fires.
D) A and C.

Answer --> D


1544) Fires that involve organic material called humus that generally covers the soil of forested areas are known as–

A) Groundcover fires
B) Surface fires.
C) Ground fires
D) Duff fires.

Answer --> C

1545) The most common type of groundcover fire burning on the soil surface consuming low lying grass, shrubs, and other vegetation are known as –

A) Groundcover fires  
B) Surface fires.  
C) Ground fires  
D) Duff fires.

Answer -->  B


1546) Which type of fire can go undetected for months before it enters the flaming stage?

A) Underground fires.  
B) Surface fires.  
C) Ground fires  
D) Crown fires.

Answer -->  C


1547) Which of the following best describes the phenomena in which fuels that contain less moisture ignite more easily and burn with greater intensity than those with a higher moisture content?

A) Fuel moisture content.  
B) Fuel moisture differential.  
C) Fuel moisture ratio.  
D) Fuel moisture dynamics.

Answer -->  A


1548) A friction match with a large head capable of burning in a wind is called a –

A) Lucifer match.  
B) Fusee.  
C) Safety match.  
D) Locofoco.

Answer -->  B

1549) The first and most important principle in fighting ground cover fires is –

A) Fire location.
B) Instant access.
C) Weather conditions.
D) Life safety.

Answer --> D


1550) When fighting ground cover fires, all the following would be considered resources except for –

A) Water supply.
B) Personnel.
C) Rain in the weather forecast.
D) Apparatus and equipment.

Answer --> C


1551) During a ground fire incident, situational awareness must be continued throughout the incident to counter any changes in –

A) Fire behavior.
B) Weather.
C) Topography.
D) All the above.

Answer --> D


1552) What resources are used in wildland fires to monitor fire development and spread?

A) Lookouts.
B) Communications.
C) Watches.
D) Overlooks.

Answer --> A

1553) At a wildland fire, where should the safety zone be established?

A) In the unburned area.
B) In the burned area.
C) Upwind and uphill from the fire.
D) Downwind and downhill from the fire

Answer --> B

Only if it has significantly cooled and is accessible.

1554) Salvage operations encompass all of the following except –

A) Reducing primary and secondary damage.
B) Reducing smoke damage.
C) Searching for hidden fires.
D) Reducing water damage.

Answer --> C

Searching for hidden fires would be overhaul operations.

1555) The quality of an organization's relationship with individuals who have contact with that organization is known as –

A) Community service.
B) Community relations.
C) Customer relations.
D) Customer service.

Answer --> D


1556) The practice of minimizing damage and providing customer service through effective mitigation and recovery efforts before, during and after an emergency incident is known as –

A) Loss control.
B) Salvage.
C) Overhaul.
D) Property conservation.

Answer --> A

1557) An aspect of loss control that consists of those operations associated with fire fighting that aid in reducing primary and secondary damage during fire fighting operations is known as –

A) Salvage.
B) Overhaul.
C) Property conservation.
D) Scene preservation.

Answer --> A


1558) An aspect of loss control that consists of those operations involved in searching for extinguishing hidden or remaining fires is known as –

A) Scene examination.
B) Overhaul.
C) Mop–up.
D) Scene preservation.

Answer --> B


1559) Salvage operations should commence –

A) Upon arrival on the scene.
B) After suppression operations have been terminated.
C) After overhaul operations have terminated.
D) After the fire marshal has inspected the scene for arson evidence.

Answer --> A


They continue until the last unit leaves the scene.

1560) Overhaul operations consist of all of the following except –

A) Searching for and extinguishing hidden fires.
B) Recognizing and preserving any evidence of arson.
C) Making the fire area and contents safe from the elements.
D) Ventilating the building.

Answer --> D

1561) The final part of salvage is –

A) Gathering all furniture and placing it in the center of a room and covering it with a tarp.
B) Removing excess water from the structure.
C) Removing destroyed contents from the structure.
D) Protecting the property from the weather and from trespassers.

Answer -->  D


1562) Your engine company arrives at a one story wood-framed residential structure. The attic is involved with a small fire. Your ladder company has ventilated the roof and is standing by with a charged line. Your engine company is in the room just below the fire (uninvolved at this time) also with a charged line. What action would you take?

A) Order your ladder company to extinguish the fire through the ventilation hole they just cut.
B) Order your engine company to pull the ceiling and extinguish the fire from the floor below.
C) Order manpower to cover or remove the contents of the room prior to pulling the ceiling.
D) None of the above.

Answer -->  C


1563) In salvage operations, the most desirable procedure dictates that room contents should be –

A) Gathered to the center of the room to be covered.
B) Left in place until the cause of the fire can be determined.
C) Removed from the room or moved to the outside of the building.
D) Only non burned contents should be covered.

Answer -->  C


CodeRQ

Answer change from last version. Old answer was A. However, gathering items to the center of the room and covering them is still the most often used procedure. Removing them from the structure is the best procedure.

1564) Which of the following would you NOT expect to find in an Automatic Sprinkler Kit?

A) Extra sprinkler heads.
B) Sprinkler wrench.
C) Sprinkler tong or stopper.
D) Sprinkler wedges.

Answer -->  A

All Chapters

1565) Carryalls are used for which of the following purposes?

A) To carry debris or smoldering objects.
B) To carry handtools into the fire.
C) For storing SCBAs after they have been used.
D) For carrying the belongings of the occupant.

Answer --> A


1566) The best method for removing large amounts of water from a basement is to use a –

A) Fire department pumper.
B) Portable water pump.
C) Water chute.
D) Water vacuum.

Answer --> B


1567) How many firefighters does it take to roll a One-Firefighter spread?

A) 1
B) 2
C) 3
D) 4

Answer --> B


Trick question. One firefighter to spread it, but two firefighters to roll it.

1568) What is the most effective means for removing water from a building, that is leaking through the ceiling from the floor above?

A) Portable water pump.
B) Portable vacuum.
C) Water chute.
D) Fire department pumper.

Answer --> C

1569) A __ is made from a salvage cover that is placed on the floor for the purpose of holding small amounts of water.

A) Chute.
B) Catchall.
C) Carryall.
D) Coverall.

Answer -->  B


1570) When pulling a ceiling during overhaul activities, the best tool for the job is –

A) A pike pole.
B) An axe.
C) A Plaster hook.
D) A and C only.

Answer -->  D


1571) During overhaul procedures –

A) A charged attack line should always be available.
B) Booster lines are all that's needed.
C) Pressurized water cans are all that is necessary.
D) Garden hoses provide sufficient protection during overhaul activities.

Answer -->  A


1572) Who should visually direct and supervise overhaul operations?

A) An officer leading the overhaul crew.
B) A fire investigator.
C) An officer not directly engaged in overhaul tasks.
D) Both B and C.

Answer -->  D

1573) Small burning objects found during overhaul should be extinguished using which of the following methods?

A) Soaked down with a fog stream.
B) Soaked with a wetting agent and sprayed with a pressurized water tank.
C) Dunked in a bucket of water.
D) Covered with Class A foam.

Answer -->  C


You should then drench them with a hose stream.

1574) During overhaul, large smoldering objects such as mattresses and stuffed furniture should –

A) Be soaked down with a fog stream until they are no longer smoldering.
B) Be cut up into small sections and soaked in large tubs of water.
C) Be removed to the outside of the building where they can be easily extinguished without imposing much water damage on the structure.
D) Be left in place, closely monitored by firefighters for rekindling.

Answer -->  C


1575) All of the following may be evidence of a hidden fire except –

A) Wet wallpaper.
B) Peeling paint.
C) Cracked Plaster.
D) Smoke emitting from cracks.

Answer -->  A


Also the discoloration of materials, rippled wallpaper, and burned areas.

1576) When using a pike pole to pull a ceiling during overhaul, the firefighter should do all of the following except –

A) Stand between the area being pulled and a doorway that provides the means of escape.
B) Pull down and away from the firefighter’s body.
C) Stand directly under the area being pulled.
D) Wear full protective equipment.

Answer -->  C

1577) The only way to know if fires in bales, rags, cotton, hay, and other similar materials have been fully extinguished is by –

A) Wetting them down with a fog stream for at least 15 minutes.
B) Wetting them down with a straight stream for 15 minutes.
C) Soaking them in a large body of water such as a pool or pond.
D) Breaking them completely apart.

Answer --> D


1578) Firefighters should feel walls and floors for heat using the –

A) Palm of the hand.
B) Back of the hand.
C) Index and middle fingers.
D) Thumb.

Answer --> B


IFSTA dropped the reference of using the back of the hand to feel for heat in this section, but this procedure is commonly used in the fire service. In addition the thermal imager is proving to be a more reliable technique.

1579) From a community standpoint, what is the end result of good loss control practices?

A) It raises community awareness of the dangers of fire.
B) It holds down the cost of fire insurance in the community.
C) It builds goodwill between the fire service and the community.
D) It increases in real dollar contributions, and/or funding to the department by the community.

Answer --> C


1580) During normal salvage operations, how many salvage covers are required to cover the contents of an average size room?

A) 1
B) 2
C) 3
D) 4

Answer --> A

1581) Your crew is assigned to perform salvage operations inside a bedroom. Where should the chest of drawers be placed?

A) On its side, directly on the bed.
B) On its side, to one side of the bed.
C) Upright, at the foot of the bed.
D) On its side, at the foot of the bed.

Answer --> C


1582) What purpose can a rolled rug serve in salvage operations?

A) It can be used as a water chute.
B) It can be placed on top of furniture, acting as a stiff pole under the salvage cover, allowing water to run off both sides of the covered furniture.
C) It may be used to absorb excess water on the floor.
D) It can be used as a salvage cover.

Answer --> B


1583) What should firefighters do if there is a shortage of salvage covers?

A) Use the available covers as water chutes, and catchall.
B) Stack the occupant’s belongings higher than normal, and use available covers.
C) Consolidate several rooms of furniture in one room, and use available salvage covers.
D) Use the available salvage covers to cover the highest valued belongings.

Answer --> A


1584) The principle reason why canvas salvage covers should be washed after being exposed to the ashes of a fire is –

A) To prevent the cover from smelling like mildew.
B) To prevent the belongings being covered from becoming soiled the next time the cover is used.
C) To prevent the cover from rotting because of a chemical reaction of the carbon contained in the ash.
D) To foster a clean appearance.

Answer --> C

1585) Which of the following is NOT normally used for repairing salvage covers?

A) Hot glue gun plugs.
B) Duct or mastic tape.
C) Iron–on patches.
D) Sew-on patches.

Answer --> A


1586) Why should floor runners be used during salvage operations?

A) To point the way to involved areas for the salvage crew.
B) To protect the floors from heat.
C) To protect the floor coverings of the occupancy.
D) To channel water out of the occupancy.

Answer --> C


1587) The __ is the most common method in which firefighters deploy salvage covers.

A) Balloon throw.
B) Parachute throw.
C) Tarp throw.
D) Fireman’s throw.

Answer --> A


1588) How many firefighters are usually required to construct a catchall?

A) 1
B) 2
C) 3
D) 4

Answer --> B

1589) What is the main purpose of covering all openings in a structure after a fire?

A) To keep vandals out.
B) To protect the structure from further damage by the weather.
C) To lower the owners liability if someone becomes injured at the occupancy.
D) To restrict the amount of incoming air in case of rekindle.

Answer --> B


1590) What is the best tool to use during overhaul operations for opening up walls and floors?

A) Pike poles, and plaster hooks.
B) Battery-operated saws.
C) Bale hooks and pitchforks.
D) Axes.

Answer --> D


1591) Which of the following electronic sensors are capable of detecting hidden fires in walls?

A) Thermal signature detection, Ultrasonic signature detection.
B) Electron microscopy signature detection, Infrared signature detection.
C) Ultraviolet signature detection, Infrared signature detection.
D) Thermal signature detection, Infrared heat detection.

Answer --> D


1592) Which of the following are capable of harboring hidden fires for prolonged periods of time?

A) Insulation materials.
B) Voids between ceilings and floors.
C) Attics and crawl spaces.
D) Sealed basements.

Answer --> A

1593) A device that is designed to be driven into the wall or wooden framing to provide a strong point from which to hang salvage covers is called

A) S–hook.
B) L–hook.
C) J–hook.
D) K–hook.

Answer -->  C


1594) Who should be conducting overhaul operations after a fire has been contained?

A) The firefighters involved with the extinguishment of the fire.
B) The firefighters involved in rescue operations.
C) Fresh firefighters who were not involved with either the suppression or rescue operations.
D) All of the above.

Answer -->  C


Firefighters involved with suppression and rescue operations are normally exhausted and are more susceptible to injury.

1595) Which statement regarding overhaul operations is not true?

A) Firefighters should maintain awareness of available exit routes.
B) Firefighters should continue working in teams of two or more.
C) RIT members can be relieved of their duties and are free to join in overhaul operations.
D) Firefighters should beware of hidden gas or electrical utilities.

Answer -->  C


RIT should be maintained through the overhaul process.

1596) Typically, overhaul begins –

A) At the tallest point in the structure.
B) At the lowest point in the structure.
C) In the area of least severe involvement.
D) In the area of most severe involvement.

Answer -->  D

1597) What should firefighters do when fire has burned around windows or doors?

A) Use the back of the hand to feel for heat in the wooden moldings around the doors or windows.
B) Use a thermal imager to look for signs of excessive heat beneath these moldings.
C) Remove the moldings in order to properly check for hidden fire.
D) All the above.

Answer --> C

The molding should be removed, and the area behind them cooled with water.

1598) Damage caused by or resulting from actions taken to fight a fire and leaving the property unprotected is called –

A) Primary damage.
B) Collateral damage.
C) Secondary damage.
D) Tertiary damage.

Answer --> C


1599) Damage caused by the fire itself and not by the actions taken to fight a fire is called –

A) Primary damage.
B) Collateral damage.
C) Secondary damage.
D) Tertiary damage.

Answer --> A


1600) A form of drain opening provided in outer walls at floor or roof level, to remove water to the exterior of the building in order to reduce water damage is called a –

A) Runoff drain.
B) Scupper.
C) Channel shoot.
D) Water duct.

Answer --> B

Notes) Page 1109, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ
1601) In the 2010 edition of NFPA 1801, the term for thermal imaging cameras was changed. The standardized term is now –

A) Thermal cameras.
B) Heat sensors.
C) Thermal sensors.
D) Thermal imagers.

Answer -->  D


1602) Thermal imagers do not provide quality images of items behind all the following materials except for –

A) Mirrors.
B) Metal.
C) Glass.
D) Gypsum board.

Answer -->  D


Thermal imagers do not provide quality images of items behind reflective materials.

1603) Your first consideration before beginning overhaul operations is –

A) Inspecting the premises.
B) Safety.
C) Developing an operational plan.
D) Eliminating or mitigating hazards.

Answer -->  B


1604) What kinds of fires should fire departments investigate?

A) Suspicious fires.
B) Fires in which accelerants were involved.
C) Structure fires only.
D) All fires.

Answer -->  D

1605) The general area where the ignition source and the material first ignited actually came together for the first time is called the –

A) Area of origin.  
B) Point of origin.  
C) Area of ignition.  
D) Point of ignition.  

Answer --> A  

1606) The exact physical location where the heat source and fuel come into contact with each other and a fire begins is called –

A) Area of origin.  
B) Point of origin.  
C) Point of ignition.  
D) Ignition center.  

Answer --> B  

1607) The sequence of events that allows the ignition source and the materials first ignited to come together is called the –

A) Fire pattern.  
B) Fire events.  
C) Fire characteristics.  
D) Fire cause.  

Answer --> D  

1608) Who provides the best opportunity to observe evidence of cause and to assist in the fire cause determination effort?

A) The fire chief.  
B) The incident commander.  
C) The fire investigator.  
D) The firefighters fighting the fire.  

Answer --> D  
1609) The crime of willfully, maliciously, and intentionally starting an incendiary fire or causing an explosion to destroy one's property or the property of another is called –

A) Arson.
B) Pyromania.
C) Torching.
D) Torching off.

Answer -->  A


1610) The apparent and obvious design of burned material and the burning path of travel from the point of origin is called the –

A) Fire path.
B) Fire pattern.
C) Burn pattern.
D) Arson pattern.

Answer -->  B

This was previously known as burn pattern. The term has changed.

1611) Arsonists are more apt to set fires under which of the following weather conditions?

A) During warm weather, because the fire is harder to cool down.
B) During cold weather, because fewer witnesses will be around to see him/her.
C) During inclement weather, because it will take longer for the fire department to respond.
D) Weather does not play a role to predict when an arsonist will set a fire.

Answer -->  C


1612) Firefighters should take note of which of the following during the course of a fire event?

A) People leaving the scene by car.
B) People arriving at the scene while the fire is working.
C) People staying and watching the fire.
D) It is not the firefighter's job to note individuals arriving or leaving a fire scene.

Answer -->  A

Most people are curious and will stay and watch a fire.
1613) A combustible material such as rolled rags, blankets, newspapers, or flammable liquids, used to spread fire from one point to another is called a –

A) Incendiary devices.  
B) Trailers.  
C) Incipient igniters.  
D) Urban duff.  

Answer -->  B


1614) All of the following represent observations firefighters should make upon arriving at a scene except –

A) Location of the fire.  
B) Wind direction and velocity.  
C) The presence of trailers.  
D) Noticing whether windows are locked or unlocked.  

Answer -->  C


Firefighters should look for the presence of trailers during the firefighting operation not upon arriving at the scene. Sorry, trick question.

Firefighters should also try to observe Time or arrival and extent of the fire, containers or cans found outside the structure, burglary tools present, and familiar faces in the crowd of bystanders.

1615) En route to a fire scene it is the firefighter's responsibility to note all of the following factors except –

A) The presence of unusual odors.  
B) The presence of man–made barriers that block access of the apparatus.  
C) Weather and natural hazards.  
D) Time of day.  

Answer -->  A


Noting the presence of odors is usually observed while the firefighter is fighting the fire. However, SCBA should always be worn during fire suppression.

People leaving the scene should also be noted.
1616) Which of the following factors has a great effect on the natural path of fire spread?

A) Wind direction and velocity.
B) Barometric pressure and cloud cover.
C) Time of day and the extent of the fire.
D) Location of the fire.

Answer --> A


1617) Firefighter Chris says that firefighters should look for familiar faces in the crowd of bystanders. Take note of anyone who seems to be present at several fires. Firefighter Jason says that firefighters while fighting the fire should periodically remove their SCBA mask in order to detect unusual odors at the scene. Who is correct?

A) Firefighter Chris.
B) Firefighter Jason.
C) Both are correct.
D) Both are incorrect.

Answer --> A


Never remove your SCBA mask during a fire.

1618) All of the following would be an indication of arson except –

A) Several rekindles in the same area.
B) Flashback.
C) Flashover.
D) Reignition.

Answer --> C


1619) Firefighter Frank says that most incendiary devices don't leave evidenced of their existence at a fire scene. Firefighter Fred says metal cans or plastic containers found outside the structure, may have been used to transport accelerants. Who is correct?

A) Firefighter Frank.
B) Firefighter Fred.
C) Both are correct.
D) Both are incorrect.

Answer --> B

1620) Firefighter Betty says when investigating the cause of a fire, business records should be checked to see if they are current and up to date. Firefighter Liza says when investigating the cause of a fire, business records should be checked to see if they were left exposed to the fire or in their normal place. Who is correct?

A) Firefighter Betty.
B) Firefighter Liza.
C) Both are correct.
D) Both are incorrect.

Answer --> B


1621) Noting a fire's movement and intensity can help trace all of the following except –

A) How the fire spread.
B) Identify the original ignition source.
C) Determine the monetary loses from the fire.
D) Determine the fuel(s) involved.

Answer --> C


1622) Which would NOT be considered a suspicious area for a fire to start?

A) Bathtubs.
B) File drawers.
C) Kitchens.
D) Closets.

Answer --> C


1623) All are indications of arson except –

A) Intrusion alarms have been tampered with or intentionally disabled.
B) Major appliances missing and/or replaced with junk.
C) A lack of material possessions in the structure.
D) Fire detection and protection systems have been tampered with.

Answer --> C


Although the absence of important personal possessions such as photo albums, furnishings, appliances, toys, and pets may be an indication of possible arson, it certainly is not definitive proof. The amount of personal possessions an occupant has, is related to his/her economic status, and/or personal life-style.
1624) Preserving evidence of the fire scene is the responsibility of which of the following?

A) Line officers.
B) The incident commander.
C) The driver operator/engineer.
D) All firefighters at the scene.

Answer --> D


1625) The search for the area of origin of a fire starts –

A) On the outside of the building.
B) From the unburned portion of the interior.
C) From the area of the greatest charring.
D) A and B.

Answer --> D


1626) Firefighter Richard says that firefighters should not remove more debris than is necessary during salvage operations.
Firefighter Barbara says that firefighters should be thorough in their salvage operations and should attempt to leave the scene as neatly and as orderly as possible.
Firefighter James says that thorough salvage and overhaul operations in the area of origin should not be performed until the cause of the fire has been determined.

Who is correct?

A) Firefighter Barbara.
B) Firefighter Richard and Firefighter Barbara.
C) Firefighter Richard and Firefighter James.
D) Firefighter Barbara and Firefighter James.

Answer --> C


Thorough salvage and overhaul efforts can destroy evidence.

1627) Which of the following are considered fire indicators?

A) Fire patterns.
B) Melted metal and glass.
C) Degree of damage to the structure and contents.
D) All the above.

Answer --> D

1628) After the fire investigator has completed collecting evidence, where should burned debris be piled?

A) It should remain in the premises for the property owner to deal with.
B) It should be piled in the street.
C) It should be piled on the side walk.
D) It should be piled in the backyard or alley.

Answer --> D


1629) Firefighter Bill says that charred documents found in a fireplace should be removed and placed in a waterproof container. Firefighter Will says that charred documents found in a fireplace should be gently soaked down to prevent further deterioration. Firefighter Phil says that charred documents found in a fireplace should be protected by immediately closing dampers and other openings. Who is correct?

A) Firefighter Bill.
B) Firefighter Bill and Will.
C) Firefighter Phil.
D) Firefighter Phil and Bill.

Answer --> C


1630) Floor charring maybe a result of which of the following?

(1) Flashover.  (2) Fuel at a greater height falling downward in a flaming state. (3) Ventilation. (4) Ignitable liquids.

A) 1, 4.
B) 1, 2, 4.
C) 1, 3, 4.
D) 1, 2, 3, 4.

Answer --> D


1631) How should firefighters protect footprints until they can be photographed, or plaster casts can be made?

A) Cover them with cardboard boxes.
B) Cordon them off with fire line tape.
C) Cover them with a tarp or salvage cover.
D) Mark them with florescent spray paint.

Answer --> A

1632) The majority of fires in North America are –

A) Accidental or natural.
B) Incendiary.
C) Willful.
D) Malicious.

Answer --> A


1633) Fires that are caused by unintentional acts or omission are known as –

A) Accidental.
B) Natural.
C) Willful.
D) Malicious.

Answer --> A


1634) Fires that are set with criminal intent are known as –

A) Criminal fires.
B) Arson fires.
C) Willful fires.
D) Incendiary fires.

Answer --> D


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1635) Fires that are caused by lightening, spontaneous heating such as hay bales decomposing and generating heat are known as –

A) Accidental.
B) Natural.
C) Acts of God.
D) Spontaneous combustion.

Answer --> B

1636) Fires that are intentionally set are known as –

A) Criminal fires.
B) Intentional fires.
C) Incendiary fires.
D) Malicious fires.

Answer --> C


1637) What would be considered another term for arson fires?

A) Incendiary.
B) Intentional.
C) Willful.
D) Malicious.

Answer --> A


1638) Charred vertical surfaces such as walls, closed doors, and objects will face towards –

A) The unburned side of the fire.
B) The area or point of origin of the fire.
C) The area opposite to the point of origin of the fire.
D) The side of the structure in which the wind is blowing from.

Answer --> B


1639) Continuous changes of possession of physical evidence that must be established in court to admit such material into evidence is known as –

A) Progression of evidence.
B) Evidence preservation.
C) Evidence progression.
D) Chain of custody.

Answer --> D

1640) Material or other chemicals designed and used to start fires are known as –

A) Accelerants.
B) Incendiary devices.
C) Molotov cocktails.
D) Ignition devices.

Answer -->  B


1641) Which of the following may produce abnormally high heat and may be confused with the use of accelerants?

A) Synthetic carpets.
B) Natural wall hangings.
C) Polyurethane.
D) Household cleaning materials.

Answer -->  C


1642) The exact physical location where a heat source and fuel come in contact with each other and start a fire is known as the –

A) Hot zone.
B) Point of origin.
C) Point of ignition.
D) Black zone.

Answer -->  B


1643) What does the discovery of what appears to be multiple areas of origin indicate?

A) An unintentional fire.
B) The indication that a strong wind was present in the fire container.
C) The fire was intentionally set.
D) All the above.

Answer -->  C

1644) Recent laboratory tests on fire started with accelerants indicate that –

A) Fire and burn patterns traditionally used for fire indicators are extremely reliable.
B) 95% of the time when such accelerants are used, arson is the cause of the fire.
C) Fire burn patterns traditionally used for fire indicators are not as reliable as once thought.
D) The intensity of the fire is evenly distributed throughout the container.

Answer -->  C


Firefighters should be aware of general patterns that will exist and realize that a fire investigator should be called if there are any questions concerning the area of origin or fire cause.

1645) Where would be the point of origin of an exterior fire on flat ground, with consistent fuel, and no wind?

A) In the center of the circular fire pattern.
B) In the area of the greatest char.
C) On the perimeter of the fire pattern.
D) All the above.

Answer -->  A


This type of condition in which the ground is level, the fuel is consistent and there is no wind would be extremely rare.

1646) In an exterior fire where would you expect more unburned materials to remain?

A) At the fingers of the fire.
B) At the area of origin.
C) On the periphery of the fire.
D) At the head of the fire.

Answer -->  B


1647) In an exterior fire, grass will fall in what direction to the fire as it burns?

A) Towards the area of origin.
B) Away from the area of origin.
C) Perpendicular to the area of origin.
D) In a counterclockwise circular motion.

Answer -->  A


Even if the grass completely burns, the remaining ash will still point toward the area of origin.
1648) An ignition source that has sufficient temperature and energy to be in contact with fuel long enough to raise it to its ignition temperature is called a –

A) Capable ignition source.
B) Pertinent ignition source.
C) Competent ignition source.
D) Qualified ignition source.

Answer -->  C


1649) The history of the fire, beginning when the ignition source and the first fuel ignited meet at the area of origin, and proceeding through the entire duration of fire spread through the scene is known as –

A) Fire events.
B) Fire chronology.
C) Ignition sequence.
D) Ignition events.

Answer -->  C


1650) Besides accidental all of the following would be considered acceptable classifications of fire causes except for –

A) Natural.
B) Incendiary.
C) Undetermined.
D) Determined.

Answer -->  D


1651) Who has the initial responsibility of fire scene security?

A) The first arriving police officers.
B) The first arriving fire officer.
C) The incident commander.
D) Fire suppression personnel who respond to extinguish the fire.

Answer -->  D

1652) Early security measures at a fire should include which of the following?

A) Restricting access to the scene.
B) Protecting any potential evidence located in the area.
C) Minimizing fire suppression and over all activities that could destroy important information regarding the origin and cause of the fire.
D) All the above.

Answer --> D


1653) During incidents involving explosions, a perimeter should be established at _____ the distance from the farthest point debris was found.

A) 1.0 times.
B) 1.5 times.
C) 2.0 times.
D) 2.5 times.

Answer --> B


1654) At a structure fire, where should a perimeter be established?

A) 100 feet from the structure in all directions.
B) The perimeter should include the involved structure plus all structures surrounding the incident.
C) It should extend beyond the farthest piece of evidence located during exterior examination of the structure.
D) The perimeter should involve the structure itself and all access roads leading to the incident.

Answer --> C


1655) To be effective, fire scene perimeters must be –

A) Recognizable.
B) Enforceable.
C) Extensive.
D) A and B.

Answer --> D

1656) All the following statements regarding establishing parameters at fire scenes is true except for –

A) The initial perimeter should only be as large as necessary to conduct an investigation.
B) Ensure that the perimeter is visible and recognizable to everyone at the scene.
C) Use uniform law enforcement officers or firefighters to control access into the established perimeter.
D) Keep a log of all persons who enter and leave the incident perimeter whenever it is necessary to limit the number of personnel entering the scene.

Answer -->  A


1657) The term that refers to anything that can taint physical evidence is known as –

A) Corruption.
B) Contamination.
C) Pestilence.
D) Spoliation.

Answer -->  B


1658) The term that refers to evidence that is destroyed, damaged, altered, or otherwise not preserved by someone who has responsibility for the evidence is known as –

A) Corruption.
B) Contamination.
C) Pestilence.
D) Spoliation.

Answer -->  D


1659) What is THIRA ?

A) A family fire prevention initiative.
B) An acronym for Threat and Hazard Identification and Risk Assessment.
C) An entity of Homeland Security that investigates suspicious fires.
D) An incendiary liquid use to mask arson fires.

Answer -->  B

1660) Which of the following processes of THIRA would attempt to answer the question: “What could happen in my community?”

A) Give the threats and hazards context.
B) Examine the core capabilities.
C) Identify the threats and hazards.
D) Set capability targets.

Answer --> C


1661) Which of the following processes of THIRA would use capability targets to decide how to use resources from the whole community?

A) Give the threats and hazards context.
B) Examine the core capabilities.
C) Apply the results.
D) Set capability targets.

Answer --> C


1662) Which of the following processes of THIRA would attempt to answer the question: “What effect would each threat or hazard have on the jurisdiction’s core capabilities as identified in the National Preparedness Goal?”

A) Give the threats and hazards context.
B) Examine the core capabilities.
C) Identify the threats and hazards.
D) Set capability targets.

Answer --> B


1663) Hazard identification requires that the community –

A) Determines the specific types of hazards it will face.
B) Determines the threat the hazard will pose.
C) Make an estimate of the portion of the population that may be affected.
D) All the above.

Answer --> D

1664) THIRA threats and hazards are divided in all but which of the following categories?
A) Cyber hazards.
B) Natural hazards.
C) Threats or human-caused hazards.
D) Technological hazards.

Answer --> A


1665) A good model for THIRA program delivery would include which of the following?
A) 1, 2, 5.
B) 2, 4, 5.
C) 1, 2, 3, 5.
D) 1, 2, 3, 4, 5.

Answer --> D


This is called the five Es.

1666) Enforcement activities assigned to the fire department are generally limited to all but which of the following?
A) Building code enforcement.
B) Insurance code enforcement.
C) Fire code enforcement.
D) Life safety code enforcement.

Answer --> B


1667) THIRA economic incentives –
A) Penalize the individual for not participating in the program.
B) Offer tax deductions for installing sprinkler systems.
C) Pay the individual participating in the program.
D) B and C.

Answer --> D

1668) Which THIRA element provide solutions to prevent a hazard or reduce harm once a hazard occurs?
A) Emergency response.
B) Engineering.
C) Enforcement.
D) Education.

Answer --> B


1669) Fire and life safety education is designed to –
A) Inform citizens about unsafe behaviors and provide information on how to change those behaviors.
B) Teach citizens how to survive a fire if one occurs in their home.
C) Enforce fire codes within a given jurisdiction.
D) All the above.

Answer --> A


1670) A condition that encourages a fire to start or increases the extent or severity of a fire is known as a –
A) Fire source.
B) Fire hazard.
C) Fire potential.
D) Safety hazard.

Answer --> B


1671) Unsafe behaviors or conditions that could result in injury, death, or property damage not associated with fire is known as –
A) Hazard source.
B) Safety violation.
C) Safety danger.
D) Safety hazard.

Answer --> D

1672) Which of the following hazards can benefit from fire and life safety education?

A) Unsafe behaviors.
B) Unsafe conditions.
C) Hazardous processes.
D) All the above.

Answer --> D


1673) All of the following would be considered unsafe behaviors except for –

A) Poor housekeeping.
B) Careless use of flammable and combustible liquids.
C) Dead battery in or nonworking smoke detector.
D) Not wearing seatbelts.

Answer --> C


A dead battery or a nonworking smoke detector would be considered an unsafe condition.

1674) All the following would be considered unsafe conditions except for –

A) Ice on sidewalk or exterior stairs.
B) Lose handrail on stairway.
C) Unsecured swimming pool access.
D) Unattended cooking materials.

Answer --> D


Unattended cooking materials would be considered an unsafe behavior.

1675) Which of the following would be considered an important category for fire and life safety messages?


A) 1, 4.
B) 2, 3, 4.
C) 1, 2, 3, 4.
D) 1, 2, 3, 4, 5.

Answer --> C

1676) The "Prevent" category for fire and life safety messages would include all but which of the following?

A) Install a home sprinkler system.
B) Smoke outside.
C) Correct fire and burn hazards in the kitchen.
D) Use a flashlight when the power is out.

Answer --> A


Installing a home sprinkler system would fall under the category of "Prepare."

1677) The "Prepare" category for fire and life safety messages would include all but which of the following?

A) Install and test smoke alarms.
B) Practice a school fire drill.
C) Know who will wake up and assist children.
D) Set water heaters at 120 degrees F.

Answer --> D


Setting the water heater to 120 degrees F would fall under the category of "Prevent."

1678) The "Protect" category for fire and life safety messages would include all but which of the following?

A) Crawl low under smoke.
B) Get out fast and stay out.
C) Extinguish candles when you leave a room.
D) Stop, drop, and roll if you're close catch on fire.

Answer --> C


Extinguishing candles when you leave a room would fall under the "Prevent" category.
1679) The "Persuade" category for fire and life safety messages would include all but which of the following?

A) Encourage outside smoking only.
B) Call 911 or local emergency number after escape.
C) Install, test, and maintain residential smoke alarms.
D) Attend public fireworks displays and avoid personal use of fireworks.

Answer --> B

Calling 911 would fall under the category of "Protect."

1680) What is the youngest age group to whom fire and life safety messages can be effectively taught?

A) Preschool children.
B) Elementary age children.
C) Middle school children.
D) High school students.

Answer --> A


1681) All the following fire and life safety messages would be appropriate for elementary age children except for –

A) Smoke alarm safety.
B) Survival skills.
C) Use or misuse of fire.
D) Home escape plan.

Answer --> A

Smoke alarm safety would be more a topic for high school students.

1682) All the following fire and life safety messages would be appropriate for preschool children except for –

A) Matches and lighters safety.
B) Stop, drop, and roll.
C) Home escape.
D) Smoke alarm response.

Answer --> D

Smoke alarm response would be more a topic for elementary age children.
1683) All the following fire and life safety messages would be appropriate for middle school children except for –

A) Safe driving habits.
B) Fire science, making the connection between fire behavior and classroom science.
C) Health and safety education, such as CPR training.
D) Cooking safety.

Answer --> A


Safe driving habits would be more a topic for high school students.

1684) Which age group is twice as likely to die in a fire, leading all other age groups in fire-related deaths?

A) Preschool children.
B) High school students.
C) Adults.
D) Older adults.

Answer --> D


They're also at greater risk for injuries due to fire and burn injuries as well as injuries related to trips and falls.

1685) What is the leading cause of fire fatalities among older adults?

A) Fires related to cooking.
B) Careless smoking.
C) Fires from faulty electrical wiring.
D) Fires related to poorly maintained heating equipment.

Answer --> B


1686) What is the leading cause of fire-related injuries among older adults?

A) Fires related to cooking.
B) Careless smoking.
C) Fires from faulty electrical wiring.
D) Fires related to poorly maintained heating equipment.

Answer --> A

1687) Structure surveys are performed by fire companies for which of the following reasons?

A) To become familiar with public-access structures and workplaces.
B) To provide a public service to homeowners and renters in their place of residence.
C) Because they are mandated by law.
D) A and B.

Answer --> D


1688) Surveys in private residential structures are –

A) Not required by law.
B) Required annually.
C) Required in residences over one-story tall.
D) Required by law in urban jurisdictions.

Answer --> A


1689) Company-level preincident surveys are generally conducted on all but which of the following occupied structures?

A) Hotels and motels.
B) Apartment complexes.
C) Private residences.
D) Commercial, industrial, institutional, and educational structures.

Answer --> C


1690) Children under the age of 18 years account for ____ of all arson arrests.

A) 25%.
B) 36%.
C) 54%.
D) 61%.

Answer --> C

1691) What is the second leading cause of fatalities in residential fires?

A) Careless smoking.
B) Cooking related fires.
C) Faulty electrical wiring.
D) Juvenile fire setting.

Answer --> D


1692) Which category of juvenile fire setters would include boys and girls between two and 10 years of age?

A) Curiosity/experimental.
B) Troubled/crisis.
C) Delinquent/criminal.
D) Pathological/emotionally disturbed.

Answer --> A


1693) Which category of juvenile fire setters would include those who set multiple fires that are very destructive and sophisticated?

A) Curiosity/experimental.
B) Troubled/crisis.
C) Delinquent/criminal.
D) Pathological/emotionally disturbed.

Answer --> D


1694) Which category of juvenile fire setters would include a juvenile who knows the danger of fires and the consequences of his or her actions?

A) Curiosity/experimental.
B) Troubled/crisis.
C) Delinquent/criminal.
D) Pathological/emotionally disturbed.

Answer --> C

1695) Which category of juvenile fire setters would include those who use fire to express anger, sadness, or frustration?

A) Curiosity/experimental.  
B) Troubled/crisis.  
C) Delinquent/criminal.  
D) Pathological/emotionally disturbed.  

Answer -->  B  

1696) Consensus–based standards or codes established to provide uniformity and regulations in regards to construction, design, and use is known as –

A) Building code.  
B) Model code.  
C) Fire code.  
D) Life safety code.  

Answer -->  B  

When adopted by the local jurisdiction, these codes become enforceable law.

1697) Which of the following are considered model: organizations?

A) Canadian Commission on Building and Fire Codes (CCBFC).  
B) International Code Council (ICC).  
C) National Fire Protection Association (NFPA).  
D) All the above.  

Answer -->  D  

Each code organization has a series of codes that, when adopted, can be used to regulate building components such as structural, mechanical, electrical, and plumbing, as well as fire and life safety.

1698) Model codes are only enforceable when –

A) NFPA has approved each code.  
B) They are sanctioned from the Department of defense (DOD).  
C) The AHJ adopts them.  
D) All the above.  

Answer -->  C  
1699) What is the NFPA Standard for Professional Qualifications for Fire Inspector and Plan Examiner?

A) NFPA 1031.
B) NFPA 1033.
C) NFPA 1035.
D) NFPA 1037.

Answer --> A