Scene Lighting, Rescue Tools, Vehicle Extrication, and Technical Rescue

Multiple Choice

Write the letter of the best answer on the blank provided.

1. Which of the following is powered by the power take-off system? (480)
   A. Portable lights
   B. Portable electric generator
   C. Apparatus electrical system
   D. Vehicle-mounted generator

2. Which of the following emergency scene lighting devices has the disadvantages of limited power supply and mobility? (481)
   A. Portable lights
   B. Portable electric generator
   C. Vehicle-mounted generator
   D. Apparatus electrical system

3. What type of emergency scene lighting equipment is used to light remote areas of an incident scene? (481)
   A. Fixed lights
   B. Portable lights
   C. Vehicle-mounted generator
   D. Apparatus electrical system

4. Which of the following BEST describes a limitation of fixed lights? (481)
   A. Noisy when equipped with separate engine
   B. Constant exhaust and limited power supply
   C. Number of units limited by location on scene
   D. Number of units limited by amount of power produced by generator

5. Which of the following auxiliary electrical equipment provides multiple outlets through one inlet? (484)
   A. Junction boxes
   B. Electrical cables
   C. Adapter connections
   D. Twist-lock receptacles

6. Which of the following auxiliary electrical equipment can allow mutual aid departments to operate off each other’s generators? (484)
   A. Junction boxes
   B. Electrical cables
   C. Adapter connections
   D. Twist-lock receptacles
1. Which of the following BEST describes the result of starting a generator while under load? (485)
   A. May contaminate fuel
   B. Can damage electrical system
   C. Will overheat and damage generator
   D. Allows equipment to warm up before use

2. Which of the following BEST describes how to prevent overloading when testing lighting equipment? (485)
   A. Document maintenance correctly
   B. Discard faulty bulbs in approved manner
   C. Shut off the power and allow bulbs to cool
   D. Connect each light to the generator one light at a time

3. Which of the following uses of rescue tools includes tools that ensure vehicle and structural members will not move during rescue? (486)
   A. Lifting
   B. Pulling
   C. Cutting
   D. Stabilizing

4. Which rescue tool power source may be less powerful than the others? (487)
   A. Electric
   B. Manual
   C. Hydraulic
   D. Pneumatic

5. Which rescue tool source is powered by compressed air cylinders? (488)
   A. Electric
   B. Manual
   C. Hydraulic
   D. Pneumatic

6. Which hydraulic/electric tool has an opening force that is twice as powerful as its closing force? (490)
   A. Shears
   B. Spreaders
   C. Extension ram
   D. Combination shears/spreader
7. What group of rescue tools are typically power saws? (491)
   A. Cutting tools
   B. Pulling tools
   C. Manual rescue tools
   D. Powered rescue tools

8. What type of jack uses a threaded stem/component system? (493)
   A. Screw jack
   B. Buttress jack
   C. Hydraulic jack
   D. Ratchet-lever jack

9. Which of the following types of jacks is prone to failure under heavy loads? (494)
   A. Screw jack
   B. Hydraulic jack
   C. Trench screw jack
   D. Ratchet-lever jack

10. Which of the following BEST describes to what percentage wheel chocks can hold a vehicle in place on a grade? (495)
    A. 5 to 10 percent
    B. 10 to 15 percent
    C. 15 to 20 percent
    D. 25 to 30 percent

11. Cribbing materials are painted on the ends to indicate: (496)
    A. length of cribbing.
    B. strength of cribbing.
    C. when to replace cribbing.
    D. times cribbing has been used.

12. Which of the following rescue tools gives rescuers the ability to lift or displace an object that cannot be lifted by other equipment? (496)
    A. Impact tools
    B. Come-alongs
    C. Pneumatic nailers
    D. Pneumatic lifting bags

13. In what order should stacked lifting bags be inflated? (498)
    A. There is no specific order
    B. The order determined by local SOPs
    C. Top bag first, then smaller bags as needed
    D. Bottom bag first, with smaller bags on top
14. Which of the following is an advantage of synthetic fiber cable? (500)
   A. Floats on water
   B. Heavy and rigid
   C. Durable and long lasting
   D. Affected by temperatures

15. The load capacity of a come-along ranges from: (502)
   A. 1 to 10 tons (0.9 t to 9.1 t).
   B. 10 to 12 tons (9.1 t to 10.8 t).
   C. 14 to 20 tons (12.6 t to 18 t).
   D. 20 to 22 tons (18 t to 19.8 t).

16. What rescue tool consists of a square drive onto which a socket is attached? (502)
   A. Impact tool
   B. Come-along
   C. Pneumatic nailer
   D. Pneumatic lifting bag

17. Which of the following rescue tool maintenance tasks BEST describes how firefighters can mitigate the problem of fuel separating or degrading over time? (504)
   A. Check all fluid levels
   B. Make sure that fuel is fresh
   C. Check all electrical components
   D. Make sure all protective guards are in place

18. Which of the following BEST describes a benefit of scene size-up? (504)
   A. Identifies potential hazards
   B. Controls traffic flow around scene
   C. Establishes work zones for personnel
   D. Reduces risks by following safety procedures

19. Which of the following vehicle extrication hazards can be mitigated by parking apparatus to form a barrier between scene and ongoing traffic? (505)
   A. Fire
   B. Traffic
   C. Sharp objects
   D. Blood borne pathogens

20. Which of the following fire hazards present during vehicle extrication is MOST commonly found in a vehicle's trunk and interior? (506)
   A. Vehicle batteries
   B. Downed power lines
   C. Energy-absorbing struts
   D. Flammable adhesives and liquids
21. Which of the following hazards requires proper protective measures be taken to avoid contact with bodily fluids? (507)
   A. Fire
   B. Sharp objects
   C. Bloodborne pathogens
   D. Environmental conditions

22. What type of vehicle is powered by multiple propulsion systems? (508)
   A. Electric vehicles
   B. Hydraulic vehicles
   C. Hybrid electric vehicles
   D. Conventional fuel vehicles

23. What color is used to code the wiring of a 36-volt system on a Saturn? (510)
   A. Red
   B. Blue
   C. Green
   D. Orange

24. Which of the following duties is part of assessing the entire scene at a vehicle extrication incident? (511)
   A. Check for victims ejected from vehicles
   B. Note any hazardous conditions on scene
   C. Assess condition and position of vehicles
   D. Determine extrication tasks that may be required

25. When assessing the need for extrication, when should the information gathered be reported to the Incident Commander? (511)
   A. As each assessment is completed
   B. After all assessments are completed
   C. After a command structure is established
   D. As the incident command post is established

26. Which of the following extrication duties uses equipment to support key points between the vehicle and the ground? (513)
   A. Stabilizing the victim
   B. Stabilizing the vehicle
   C. Securing the electrical system
   D. Securing passenger safety systems

27. During vehicle extrication, where should chocks be placed if the vehicle is on an incline? (514)
   A. On the uphill side
   B. On the downhill side
   C. On both sides of the tires
   D. On the side farthest from impact
28. What may be necessary to use to ensure solid contact between cribbing and the vehicle during extrication? (515)
   A. Struts
   B. Tripod
   C. Tubing
   D. Wedges

29. What type of rescue equipment is used to gain access to the interior of a vehicle by lifting an object resting on the vehicle? (515)
   A. Lifting devices
   B. Pulling devices
   C. Stabilizing devices
   D. Buttress tension system

30. What type of stabilizing system uses a system of tubes and pins to spread the vehicle load during extrication? (516)
   A. Strut system
   B. Jack system
   C. Chain and rope system
   D. Buttress tension system

31. Which of the following should be done BEFORE shutting off the power when securing the electrical system in a vehicle? (517)
   A. Raise power windows
   B. Lower power windows
   C. Disconnect the battery
   D. Cut the negative battery cable

32. Firefighters should assume electric cars are always powered up even if they do not hear: (517)
   A. radio noise.
   B. engine noise.
   C. safety system noise.
   D. vehicle battery noise.

33. Which of the following color-coded cords should never be cut on an electric vehicle? (518)
   A. Red
   B. Black
   C. Green
   D. Orange

34. Which of the following must be disabled by cutting the connection between the sensors and control unit? (521)
   A. Head protection systems (HPS)
   B. Side-impact protection system restraints (SIPS)
   C. Extendable roll over protection systems (ROPS)
   D. Supplemental passenger restraint systems (SPRS)
35. Which of the following passenger safety and head protection systems must be punctured in order to be deflated? (521)
   A. Inflatable tubes
   B. Window curtains
   C. Side curtain air bags
   D. Seat belt pretensioners

36. Removing the _____ is no longer standard extrication practice as it can seriously weaken a vehicle's body, possibly causing collapse. (524)
   A. windshield
   B. dashboard
   C. side window
   D. rear window

37. Which of the following BEST describes where tempered glass is commonly used in vehicle windows? (525)
   A. Mirrors
   B. Windshields
   C. Side and rear windows
   D. Windshields and side windows

38. What tool can be used to open a completely stuck door? (526)
   A. Shears
   B. Spreader
   C. Impact tool
   D. Come-along

39. In what type of vehicle body construction can removing the roof and doors compromise structural integrity? (527)
   A. Unibody construction
   B. Full frame construction
   C. Rigid frame construction
   D. Space frame construction

40. Placing cribbing under the base of the A-post on a unibody vehicle when displacing the dashboard prevents: (530)
   A. the dashboard from collapsing.
   B. the windshield from collapsing.
   C. the windows from returning to original positions.
   D. the dashboard from returning to its original position.

41. Which of the following best describes the role of a Firefighter II during technical rescue operations? (531)
   A. Entering confined spaces for rescue
   B. Performing specialized incident-related tasks
   C. Assisting technical rescuers in incident-related tasks
   D. Directing high angle urban/structural rescue operations
42. What initial action may involve blocking traffic and shutting off utilities? (533)
   A. Size-up
   B. Stabilize the situation
   C. Establish scene security
   D. Communicate information

43. Which of the following personnel determines the location of the outer perimeter for
   scene security? (534)
   A. First officer on scene
   B. Incident Commander
   C. Accountability Officer
   D. Firefighter II assigned to establish

44. Which of the following BEST describes the personnel allowed in the warm zone during
   an incident? (534)
   A. Those personnel who are working the incident
   B. Those directly involved in resolving the emergency
   C. Those members of the general public watching the incident
   D. Those directly supporting the personnel resolving the emergency

45. What type of structural collapse pattern occurs when the outer walls of a structure
   remain intact and upper floors fail in the middle? (538)
   A. Lean-to collapse
   B. Pancake collapse
   C. V-shaped collapse
   D. Cantilever collapse

46. What type of collapse pattern is most vulnerable to a secondary collapse? (538)
   A. Lean-to collapse
   B. Pancake collapse
   C. V-shaped collapse
   D. Cantilever collapse

47. What type of technical rescue has environmental hazards that involve fire, darkness, and
   temperature extremes? (539)
   A. Mine rescue
   B. Water rescue
   C. Vehicle rescue
   D. Structural collapse rescue

48. Which of the following BEST describes the physical hazards found during a confined
   space rescue? (539)
   A. Limited means of entry and egress
   B. Oxygen deficiency due to inadequate ventilation
   C. Rescue must happen in rugged, inaccessible terrain
   D. Hazard created by debris trapped against upstream face
49. When using the OATH method of communication during confined space rescue, one tug represents: (540)
   A. O – ok.
   B. H – help.
   C. A – advance.
   D. T – take-up slack.

50. Which of the following duties can a firefighter perform if not trained in vehicle extrication? (540)
   A. Secure passenger safety systems
   B. Pry open a completely stuck door
   C. Assist by providing care to victims
   D. Remove windows to gain access to victims

51. Personal flotation devices (PFDs) are mandatory for all personnel working within _____ of the water's edge during water rescue. (541)
   A. 10 feet (3 m)
   B. 15 feet (4.5 m)
   C. 30 feet (9.1 m)
   D. 35 feet (10.6 m)

52. Which of the following BEST describes the hazards found at low-water dams? (542)
   A. Limited means of entry and egress
   B. Oxygen deficiency due to inadequate ventilation
   C. Rescue must happen in rugged, inaccessible terrain
   D. Hazard created by debris trapped against upstream face

53. What type of technical rescue requires keeping all nonessential personnel, bystanders, and heavy equipment back to prevent vibrations from causing secondary cave-ins? (543)
   A. Water rescue
   B. Trench rescue
   C. Vehicle rescue
   D. Structural collapse rescue

54. During trench rescue operations, ladders should extend at least _____ above the top of the trench. (543)
   A. 3 feet (1 m)
   B. 8 feet (2.4 m)
   C. 10 feet (3 m)
   D. 15 feet (4.5 m)

55. What type of device BEST fits the following characteristics: permanent, slower with large access doors and either manual or automatic controls? (545)
   A. Escalator
   B. Freight elevator
   C. Passenger elevator
   D. Construction elevator
56. The power unit for a hydraulic elevator operating system is located on the lower level of the building in a room within _____ of the elevator shaft. (546)
   A. 25 feet (8 m)
   B. 50 feet (15 m)
   C. 100 feet (30 m)
   D. 110 feet (34 m)

57. Which of the following personnel should be requested to start an escalator after a victim is removed? (547)
   A. Building manager
   B. Escalator mechanic
   C. Incident Commander
   D. Accountability Officer

58. What type of technical rescue involves physical hazards such as explosive atmospheres, cave-ins, and abandoned tools and equipment? (548)
   A. Ice rescue
   B. Cave rescue
   C. Mine rescue
   D. Trench rescue

59. The energized area around a wire in contact with the ground is called: (549)
   A. hot zone.
   B. danger zone.
   C. ground contact.
   D. ground gradient.