

## Safety and Health

This test is designed to be taken without the use of any other materials or information. You will not need and *should not use* any notes, charts, tables, a calculator, or any other materials or devices.

**THIS TEST HAS 60 QUESTIONS. FOLLOW THE INSTRUCTIONS  
AFTER QUESTION 50. USE TWO ANSWER SHEETS**

### Instructions

- Print **your name** and the **Test No.** in the spaces provided at the top of the Answer Sheet (left side). Also print the same information in the spaces at the top of the Report (right side).
- Turn to the questions following this page. Read each question carefully and make sure you understand what it says.
- Read all the answers. Then choose the *best* answer, even if you do not think it is the *perfect* answer.
- Indicate your choice on the Answer Sheet by marking an **X** in the box containing the proper letter. Make sure the **X** is large and dark.
- Make sure you mark each answer on the right line. Getting out of sequence will make almost all your answers wrong.
- If you decide to change an answer, erase your first answer completely.
- If you do not know the answer to a question, do not guess. Leave the question *unanswered*.

When you are finished answering all the questions, return this test with your Answer Sheet to the instructor or examiner.

1. An unexpected event that results in injury, illness, or property damage is called a(n)
  - a accident
  - b hazard
  - c incentive
  - d violation
  
2. Failure to wear required protective equipment is an example of a(n)
  - a defective procedure
  - b unsafe act
  - c unsafe condition
  - d workplace hazard
  
3. The four main types of hazards to which you might be exposed in the plant are: electrical, chemical, mechanical, and
  - a environmental
  - b flammable
  - c static
  - d toxic
  
4. A chemical splash is an example of what type of accident?
  - a Caught between
  - b Contacted by
  - c Exposure
  - d Struck by
  
5. If you discover a chemical spill, you should clean it up only
  - a after studying the MSDS
  - b if it is in your department
  - c if you have been specially trained
  - d if you have help
  
6. If you find yourself in a workplace situation that you think probably will cause you harm or even death, your first step should be to
  - a ask your employer to eliminate the
  - b call OSHA to report the problem
  - c inform your union steward of the problem
  - d walk off the job to avoid the problem
  
7. If you think of a new way to make your job safer, you should
  - a assume that it will not work
  - b discuss it with your supervisor
  - c forget the idea and do your job the old way
  - d try it out and see if it works
  
8. OSHA's Hazard Communication standard requires chemical manufacturers and distributors to
  - a identify all hazardous chemicals
  - b locate disposal sites for hazardous chemicals
  - c stop producing hazardous chemicals
  - d train all workers who will handle hazardous chemicals
  
9. To find out what kind of PPE you must use when handling a chemical, check the \_\_\_\_\_ section of the MSDS.
  - a control measures
  - b health hazard data
  - c physical properties
  - d safety precautions
  
10. The main goal of the EPA is to
  - a conduct safety studies
  - b enforce OSHA standards
  - c evaluate hazardous substances
  - d protect the environment

11. Who is responsible for identifying PPE to be worn in the workplace?
- a Employee
  - b Employer
  - c PPE manufacturer
  - d Union leadership
12. If you are uncertain what kind of gloves to wear when working with a chemical, you should
- a assume that no gloves are required
  - b check glove manufacturers' charts
  - c use a multi-purpose glove
  - d wear two pairs
13. The clearance between the webbing and the top of a hard hat
- a allows blows to be transmitted to the skull
  - b is intended for storage space
  - c must be eliminated
  - d should be about 1 in.
14. Which of the following offers the best eye protection on the job?
- a Contact lenses
  - b Light-adjusting lenses
  - c Safety glasses
  - d Safety goggles
15. Self-contained breathing apparatus is a kind of
- a air-purifying respirator
  - b atmosphere-supplying respirator
  - c canister respirator
  - d particulate-removing respirator
16. Chemicals that can cause explosions, fires, or dangerous chemical reactions are considered
- a corrosive hazards
  - b exposure hazards
  - c health hazards
  - d physical hazards
17. Which of the following is classified as a health hazard?
- a Combustible chemical
  - b Reactive chemical
  - c Target-organ chemical
  - d Unstable chemical
18. When ingested, chemicals are absorbed into the body through the
- a esophagus
  - b intestines
  - c lungs
  - d skin
19. The three main ways of controlling chemical hazard exposures are: engineering controls, administrative controls, and
- a container labeling
  - b personal protective equipment
  - c ventilation
  - d warning signs
20. How should you treat a victim who has inhaled a hazardous chemical?
- a Get the worker a respirator
  - b Get the worker to an area of fresh air
  - c Give the worker plenty of cool liquids
  - d Give the worker something to neutralize the chemical

21. To use a wrench safely, you should
- a extend the handle with a pipe
  - b fully engage the jaws with the nut
  - c push on the handle
  - d strike it with a hammer
22. Under what conditions should you wear gloves when working with rotating electric tools?
- a Never wear gloves
  - b Wear gloves if guards are missing
  - c Wear gloves if the air is cold
  - d Wear gloves when working with metal
23. The purpose of the grounding wire in an electric tool is to protect against
- a disconnection
  - b electric shock
  - c overspeeding
  - d power supply failure
24. Before you disconnect a pneumatic tool, turn off the air supply and
- a check the pressure
  - b decrease the pressure
  - c increase the pressure
  - d release the pressure
25. Refuel gasoline engines only after the
- a engine has cooled
  - b engine has been started
  - c guards have been inspected
  - d spark plug has been removed
26. The majority of workplace injuries that occur as a result of material handling affect the
- a ankles
  - b back
  - c fingers
  - d legs
27. Which of the following rules applies when you must lift a heavy object?
- a Bend from the hips
  - b Grip the object with your fingertips
  - c Keep your back straight
  - d Keep your feet together
28. You should operate a forklift only if
- a the object being moved is too heavy for you to lift safely
  - b there are no handtrucks available
  - c you have been trained and authorized to do so
  - d you have obtained your supervisor's permission
29. Most of the injuries resulting from the accidental start-up of conveyors can be prevented if
- a conveyors are not located in a heavy traffic pattern
  - b conveyor guards are in place
  - c power is locked out during maintenance and repair
  - d walkways are installed over conveyors
30. When is it safe to stand on a suspended load?
- a When the load is less than 1000 lb
  - b When the load is less than 4 ft from the ground
  - c When the sling angle is greater than 60°
  - d Never

- 31.** Machine guards that cannot be moved when the machine is in operation are called
- a** barrier guards
  - b** enclosure guards
  - c** fixed guards
  - d** point-of-operation guards
- 32.** If a machine guard is more than 3 ft from the point of operation,
- a** it can be removed safely
  - b** it should be made of a transparent material
  - c** the maximum opening is 6 in.
  - d** you do not need to wear personal protective equipment
- 33.** What kind of machine guard requires no physical barrier between the operator and the danger zone?
- a** Automatic guard
  - b** Interlocking guard
  - c** Power transmission guard
  - d** Presence-sensing guard
- 34.** After you have locked out the power to a machine, you should
- a** be confident that no moving parts pose any danger
  - b** push the start button, then push the stop button
  - c** remove all warning signs
  - d** remove your personal protective equipment
- 35.** Assuming that lockout is impossible, when is it permissible to bypass OSHA's tagout procedures?
- a** When you are working alone
  - b** When you have warned all other employees verbally
  - c** When your job will take only a few minutes
  - d** Never
- 36.** The potential difference between two places is measured in
- a** amperes
  - b** ohms
  - c** volts
  - d** watts
- 37.** Which of the following correctly states Ohm's Law?
- a**  $I = RV$
  - b**  $R = VI$
  - c**  $V = IR$
  - d**  $W = VI$
- 38.** In an electric circuit, the hot wire is always
- a** black or red
  - b** blue
  - c** green
  - d** white or gray
- 39.** If you touch someone who is in contact with an electrical source, you will
- a** become part of the circuit
  - b** break the circuit
  - c** free them from the circuit
  - d** shut down the circuit
- 40.** The most common method of preventing the accumulation of static electricity is
- a** exploding
  - b** grounding
  - c** humidifying
  - d** painting

41. A ground fault can be defined as
- a low-voltage grounding
  - b OSHA-approved grounding
  - c static electricity grounding
  - d unintentional grounding
42. Fuses and circuit breakers act as \_\_\_\_\_ in electric circuits.
- a grounding wires
  - b protective insulation
  - c safety valves
  - d test equipment
43. Which of the following typically is considered a hazardous electrical location?
- a Construction site
  - b Manufacturing plant
  - c Office building
  - d Petrochemical plant
44. Intrinsically safe electrical equipment is designed to
- a contain explosions
  - b prevent ground faults
  - c release low electrical energy levels
  - d replace double-insulated equipment
45. When energizing electrical equipment, the electrical enclosure door should be
- a ajar
  - b bolted
  - c removed
  - d wide open
46. The four elements in the fire pyramid are fuel, heat, oxygen, and a
- a careless act
  - b chain reaction
  - c spark or flame
  - d sprinkling of gasoline
47. Class B fires involve
- a combustible liquids
  - b combustible metals
  - c energized electrical equipment
  - d paper, wood, or cloth
48. A flammable-liquid fire should be put out with an extinguisher that shows a
- a blue circle
  - b green triangle
  - c red square
  - d yellow star
49. Water puts out a fire by
- a creating a chain reaction
  - b cutting off the oxygen supply
  - c reducing the fuel temperature
  - d scattering the fuel
50. After use, a pump-tank water extinguisher must be
- a recharged
  - b reconditioned
  - c refilled
  - d replaced

**Continue on the next page.  
Use a new answer sheet.**

51. Which of the following is a good rule for lifting?
- a Hold the load away from your body
  - b Keep knees straight
  - c Lift with your arms and legs
  - d Twist while lifting
52. One way in which you can protect your hearing is to
- a measure sound levels
  - b reduce the NRR
  - c use a dosimeter
  - d wear PPE
53. Alpha, beta, and gamma radiation are all kinds of
- a ionizing radiation
  - b microwave radiation
  - c nonionizing radiation
  - d ultraviolet radiation
54. Workers exposed to brake dust must guard against lung disease caused by
- a asbestos
  - b coal dust
  - c cotton dust fibers
  - d silica sand
55. The purpose of the EPA is to
- a control chemicals in the environment
  - b enforce OSHA standards
  - c protect worker health and safety
  - d research industry accident trends
56. Guardrails must be installed on any work surface elevated at least
- a 2 ft
  - b 4 ft
  - c 6 ft
  - d 8 ft
57. If a 20-ft straight ladder is placed against a building with the top 4 ft extending above the top of the wall, the base of the ladder should be \_\_\_\_\_ from the wall.
- a 2 ft
  - b 4 ft
  - c 6 ft
  - d 8 ft
58. Hot, dry skin, headache, rapidly rising temperature, and fainting are all symptoms of
- a heat cramps
  - b heat exhaustion
  - c heat exposure
  - d heatstroke
59. The most important safety consideration for workers entering a confined space is the
- a atmosphere
  - b footing
  - c lighting
  - d temperature
60. Which organ of the human body is especially vulnerable to the light, radiation, heat, and sparks generated during welding?
- a Ear
  - b Eye
  - c Heart
  - d Lung

**End of Test**