Modern Welding 12th edition Althouse Test Bank

SKU: 9781635636864-TEST-BANK

Chapter 1 Safety in the Welding Shop

MULTIPLE CHOICE

1. When lifting, it is a good practice to ____.
   A. keep your back straight and lift with your leg muscles
   B. lift over 35 pounds using your arm muscles
   C. always bend your back while lifting
   D. None of the above.

   ANS: A PTS: 1

2. Which of the following factors does *not* promote safety in the shop?
   A. Staying healthy in mind and body.
   B. Becoming well trained in the required job or task.
   C. Having a good attitude toward safety and safety rules.
   D. Thinking about pleasant things to pass the time.

   ANS: D PTS: 1

3. ____ is a recommended material for protective clothing for welding or cutting.
   A. Nylon
   B. Polyester
   C. Leather
   D. Asbestos

   ANS: C PTS: 1

4. ____ must be stored in an approved steel cabinet.
   A. Gas cylinders
   B. Cleaning chemicals
   C. Welding rods
   D. Leathers

   ANS: B PTS: 1

5. It is recommended that ____ be worn while resistance welding.
   A. eye protection
   B. pants without cuffs
   C. a cap
   D. All of the above.

   ANS: D PTS: 1

6. Which of the following safety practices is recommended when working around electricity?
   A. Let only trained technicians do repairs on electrical equipment.
   B. Always check for loose connections and worn insulation with the power off.
   C. Assume all electricity is dangerous.
   D. Voltages of 220 volts or more should be clearly marked as dangerous.
   E. All of the above.

   ANS: E PTS: 1

7. ____ should be used to light an oxyfuel gas flame.

Modern Welding 12th edition Althouse Test Bank

A. A wooden match
B. A book match
C. A spark lighter
D. Another torch
E. An electric arc

ANS: C PTS: 1

8. Which of the following is an appropriate type of face and eye protection for resistance welding?
A. Lightly tinted welding goggles.
B. Welding helmet with a #6 filter plate.
C. Welding helmet with a #10 filter plate.
D. Welding helmet with a #14 filter plate.

ANS: A PTS: 1

9. All hand tools should be inspected for ____.
A. size
B. loose parts
C. cleanliness
D. All of the above.

ANS: B PTS: 1

10. Gas cylinders should be ____.
A. stored in an upright position
B. always moved with the safety cap in place
C. fastened with chains or steel bands
D. All of the above.

ANS: D PTS: 1

11. Which of the following metals may create toxic or deadly fumes when welded?
A. Beryllium
B. Lead
C. Cadmium
D. All of the above.

ANS: D PTS: 1

12. Fire extinguishers and fire blankets should be mounted on a surface that is painted ____.
A. orange
B. yellow
C. yellow and black
D. red
E. light blue

ANS: D PTS: 1

13. Which of the following are dangerous light rays developed during oxyfuel gas welding or cutting?
A. Incandescent.
B. Fluorescent.
C. Ultraviolet.
D. All of the above.

ANS: C PTS: 1

Modern Welding 12th edition Althouse Test Bank

14. A Class B fire extinguisher is used to extinguish ____ fires.
    A. combustible liquid
    B. electrical
    C. solid material
    D. combustible metal

    ANS: A PTS: 1

15. Which of the following is *not* a factor to consider regarding the hazard of fumes and gases?
    A. Lack of general ventilation.
    B. Confined area.
    C. Wetness.
    D. Electrode type.

    ANS: C PTS: 1

16. Documents that detail information about chemicals and substances used in the workplace are called ____.
    A. Safety Data Sheets
    B. Material Data Sheets
    C. Hazard Information Sheets
    D. Fire Safety Sheets

    ANS: A PTS: 1

TRUE/FALSE

17. It is possible to receive a burn similar to a sunburn while arc welding.

    ANS: T PTS: 1

18. Some companies require their workers to wear a back brace or support when lifting anything.

    ANS: T PTS: 1

19. Housekeeping is considered an important factor in shop safety.

    ANS: T PTS: 1

20. A high-pressure shielding gas cylinder can be moved by slightly tipping the cylinder and rolling it on its edge.

    ANS: T PTS: 1

21. Well-designed shops have low ceilings to improve ventilation and airflow.

    ANS: F PTS: 1

22. When welding on metals that may emit toxic fumes, a welder must wear a quality respirator that removes all dangerous chemicals in the air.

    ANS: T PTS: 1

Modern Welding 12th edition Althouse Test Bank

23. Heat stroke is characterized by heavy sweating.

ANS: F PTS: 1

24. The AWS suggests that a label be placed on all major arc welding equipment in order to point out the hazards of arc welding.

ANS: T PTS: 1

25. Flame-retardant-treated cotton gloves are recommended for use in welding or cutting.

ANS: F PTS: 1

26. Whenever the torch is *not* in a welder's hand, it should be turned off.

ANS: T PTS: 1

27. The American Welding Society suggests that a sticker be attached to the major equipment in an oxyfuel gas welding or cutting station to warn of hazards.

ANS: T PTS: 1

28. It is recommended that the welding operator of a robot wear leathers, a hat or cap, and safety glasses.

ANS: F PTS: 1

29. Engaging in horseplay in the shop demonstrates a lack of wisdom or intelligence.

ANS: T PTS: 1

30. To prevent back injuries when lifting, the back should always be kept straight and the object lifted with the arm muscles.

ANS: F PTS: 1

31. A pressure regulator is "OFF" when the regulator adjusting screw is turned out.

ANS: T PTS: 1

32. Grinders and wire wheels are *not* considered hazardous machines.

ANS: F PTS: 1

33. High-pressure shielding gas cylinders should be fastened securely to a wall or column when stored.

ANS: T PTS: 1

34. For oxyfuel gas cutting, it is recommended that the area be cleared of combustible materials, and at least one fire watch be posted with a fire extinguisher readily accessible.

ANS: T PTS: 1

Modern Welding 12th edition Althouse Test Bank

35. When the oxyfuel gas station is shut down, the gases should be bled from the cylinder outlet to the torch tip.

ANS: T PTS: 1

36. Pants with narrow cuffs are preferred for welding or cutting.

ANS: F PTS: 1

37. Corners or stairways that stick out into the shop are always painted bright orange or red for visibility.

ANS: F PTS: 1

38. Arc welding safety inspections should be made with the power on.

ANS: F PTS: 1

39. Matches can be safely carried in trouser pockets during resistance welding.

ANS: F PTS: 1

COMPLETION

40. The greatest hazard to a welder while laser welding is damage to the welder's _____.

ANS: eyes

PTS: 1

41. Toxic fumes should always be picked up before they reach the welder's _____.

ANS: face

PTS: 1

42. For arc cutting, it is always necessary to clear the area of combustible materials and post a(n) _____.

ANS: fire watch

PTS: 1

43. Ultraviolet and _____ rays are harmful rays emitted during arc welding.

ANS: infrared

PTS: 1

44. Acetylene gas must never be used at a gauge pressure above _____.

Modern Welding 12th edition Althouse Test Bank

ANS:
15 psig
103 kPa

PTS: 1

45. Metal that has been welded and is left somewhere to cool should be marked _____ so nobody is burned by touching it.

ANS:
HOT
Hot

PTS: 1

46. Special training in the use of explosives is required to do _____ welding.

ANS: explosion

PTS: 1

47. While resistance welding, the welder should stand on a(n) _____ platform if the floor is damp.

ANS: insulated

PTS: 1

48. If the highest pressure marked on the face of a pressure gauge is 400 psig, it is recommended that this gauge should *not* be used at pressures above _____ psig.

ANS: 200

PTS: 1

49. Pliers or _____ should be used to pick up metal in the welding shop.

ANS: tongs

PTS: 1

SHORT ANSWER

50. List five personal factors that may be responsible for causing accidents.

ANS:
Any five of the following: Stress, illness, fatigue, lack of job knowledge, age, lack of wisdom, poor attitude, drugs.

PTS: 1

Modern Welding 12th edition Althouse Test Bank

51. Why are robots dangerous to anyone working within the robot's working volume?

ANS:
The robot may hit them as it moves about rapidly.

PTS: 1

52. List two welding processes that produce sounds loud enough to injure the welder's hearing.

ANS:
Any two of the following: plasma arc welding, plasma arc cutting, explosion welding, arc gouging.

PTS: 1

53. List ways to prevent injury when lifting heavy objects.

ANS:
Keep back straight, lift with legs, know your weight limit, know the weight of the object, wear a lifting belt or back brace.

PTS: 1

54. What types of information do Safety Data Sheets provide?

ANS:
Safety Data Sheets provide information on all of the chemicals and substances found in the workplace, including their known health effects, symptoms, and first aid treatment.

PTS: 1

55. List three topics that should be covered during job or task training.

ANS:
Answers will vary, but may include safety hazards; proper operation sequence; correct placement of hands and feet; machine safety features.

PTS: 1

Modern Welding 12th edition Althouse Test Bank