1. Which letters do not designate pipe?
   a) XS
   b) S
   c) XXS
   d) XL

2. A "cistern" is used:
   a) in a water supply system
   b) in a hot water heating system
   c) in a mortuary
   d) to collect indirect drainage

3. A globe valve is used:
   a) for on/off throttling
   b) for on/off only
   c) for throttling only
   d) where low head loss is required

4. In a domestic hot water tank, the ___________ is the anode, and the _______ is the cathode.
   a) relief vent; tank
   b) tank; magnesium rod
   c) magnesium rod; relief valve
   d) magnesium rod; tank

5. "Galvanic action" is also called:
   a) meniscus
   b) capillary action
   c) rust proofing
   d) electrolysis

6. Pick the largest screw listed below:
   a) #6
   b) #8
   c) #10
   d) #12

7. Pick the largest wire listed below:
   a) #14
   b) #16
   c) #18
   d) #20

8. Left-hand thread on an acetylene fitting is usually indicated by:
   a) the line around the nut
   b) the initials "LH" stamped on the nut
   c) the nut is red
   d) the nut is green
9. When opening a cylinder feeding regulator, you should:
a) open the handwheel quickly
b) open the acetylene cylinder fully, and the oxygen one-quarter turn only
c) never stand in front of the regulator
d) put oil on a sticky valve

10. The safety device built into an acetylene cylinder is:
a) a relief valve
b) a fusible link
c) a double-seated valve
d) there are none

11. Before a septic tank can be serviced, it must be assumed for safety that:
a) flammable vapors may be present
b) confined space entry is involved
c) a drowning hazard exists
d) all of the above

12. To stop the hoisting of a load, the signalman:
a) waves both hands frantically
b) extends one hand out from the waist area, palm down
c) waves one hand back and forth over his/her head
d) extends both hands out from the waist area, palms down, in a rapid motion

13. A pipe supported through a clevis hanger from a steel I-beam, would use a __________ attached to the steel.
a) pre-drilled
b) "C"-clamp
c) perforated strap
d) none of the above

14. Galvanized schedule 40 pipe has a maximum working pressure of:
a) 100 psi
b) 125 psi
c) 150 psi
d) 250 psi

15. If a copper pipe and a galvanized steel pipe must be joined, the fitting must be:
a) a union
b) serviceable
c) exposed
d) dielectric

16. A booster pump on a high-rise building operates when there is:
a) a drop in street pressure
b) high demand on the building system
c) unusually high street pressure
d) no demand on the building system
17. Jet systems for wells employ:
   a) a venturi
   b) a turbine
   c) Archimede's Principle
   d) a piston pump

18. Excessive vibration and noise are usually an indication that the pump:
   a) is experiencing cavitation
   b) is undersized for the system demands
   c) has broken its coupler
   d) is jammed

19. The principle of water operation is:
   a) sodium cycle ion exchange
   b) filtration
   c) sedimentation
   d) reverse osmosis

20. The purpose of stadia hairs is to:
   a) measure distance
   b) calculate grade
   c) allow vertical crosshairs to be seen
   d) they serve no useful purpose

21. One of these is not a characteristic of oxy-acetylene welding flames. Which one?
   a) carbonizing
   b) oxidizing
   c) neutral
   d) impinging

22. The substance which must be present in an acetylene cylinder is:
   a) acetate
   b) acetone
   c) acid
   d) aldehyde

23. Name the type of nipple not (commonly) manufactured:
   a) close
   b) shoulder
   c) 1/2" X 2 1/2" 
   d) toe

24. When selecting a hacksaw blade, how many teeth should be in contact with the work?
   a) one
   b) three
   c) six
   d) ten
ANSWERS

1. D
2. A
3. A
4. D
5. D
6. D
7. A
8. A
9. C
10. B
11. D
12. B
13. D
14. C
15. D
16. B
17. A
18. A
19. A
20. A
21. D
22. B
23. D
24. B