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STATE PLUMBING GRAM SEMINAR MANUAL



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BOOK REVIEW QUESTIONS



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FLORIDA PLUMBING CODE





FLORIDA PLUMBING CODE 2017

1. According to the **Florida Plumbing Code**, soldering bushings used with 4" pipe shall have a minimum weight of _____ ounces.
 - A. 32
 - B. 40
 - C. 48
 - D. 56

2. According to the **Florida Plumbing Code**, which of the following require light & ventilation?
 - A. Single lavatories
 - B. Toilet rooms
 - C. Kitchen sinks
 - D. Drinking fountains

3. According to the **Florida Plumbing Code**, food handling equipment and clear-water waste, shall discharge through a/an _____.
 - A. Direct waste
 - B. Indirect waste
 - C. Sump pump only
 - D. 4" vent

4. According to the **Florida Plumbing Code**, vacuum breakers shall be located in a minimum of _____ inch(es) above the flood level of the fixture.
 - A. 8
 - B. 6
 - C. 4
 - D. 2

5. The **Florida Plumbing Code** allows the use of _____ as an alternate for lead and oakum joints for joining hub and spigot cast iron soil pipes.
 - A. 1 part cement and 2 parts sand
 - B. Burned lead
 - C. Flexible joints
 - D. Compression type gaskets

6. The **Florida Plumbing Code** states that a wet vent receives waste from _____.
- A. Urinals
 - B. Kitchen sinks
 - C. Washing machine waste
 - D. Bathroom groups
7. The **Florida Plumbing Code** requires that an _____ approved solvent cement for a pvc plastic pipe shall be used in wastes and vents.
- A. ASTM 2564
 - B. Type MX
 - C. ASTM F656
 - D. Inspected
8. The **Florida Plumbing Code** requires the test of forced sewers to be _____ and maintaining the pressure for 15 minutes.
- A. 15 psi greater than the pump rating
 - B. 5 psi greater than the pump rating
 - C. 100 psi
 - D. 125 psi
9. According to the **Florida Plumbing Code**, a central vacuum system for fluid suction shall be _____.
- A. Directly connected to the sanitary drainage system through a trapped waste
 - B. Indirect
 - C. Indirectly through a trap
 - D. Indirectly through an untrapped waste
10. According to the **Florida Plumbing Code**, 2" diameter drainage piping installed horizontally must fall a minimum of _____ per every 12'.
- A. 1 ½"
 - B. 2"
 - C. 2 ½"
 - D. 3"

11. According to the **Florida Plumbing Code**, a transition fitting for polyvinyl-chloride pipe to clay pipe in a building sewer shall have an _____.
- A. Elastomeric Seal
 - B. Increaser
 - C. Expansion joint
 - D. Ground joing
12. According to the **Florida Plumbing Code**, a building drain with 21 dfu's shall not be less than _____ in diameter.
- A. 1 ¼"
 - B. 1 ½"
 - C. 2"
 - D. 3"
13. According to the **Florida Plumbing Code**, the vertical distance from the outlet of a washing machine stand pipe to the trap weir shall not exceed _____.
- A. 18"
 - B. 24"
 - C. 36"
 - D. 42"
-
14. According to the **Florida Plumbing Code**, sheet lead used for Pans shall weight not less than _____ pound per square foot.
- A. 1
 - B. 2
 - C. 3
 - D. 4
15. According to the **Florida Plumbing Code**, a service water line 50' long, 4" in diameter with 200 gpm flowing will have a total pressure drop of _____psi. Assume existing galvanized steel pipe and select the closest answer.
- A. 1.4
 - B. 2.8
 - C. 5.6
 - D. 10.9
16. According to the **Florida Plumbing Code** _____ may not be acceptable for use as underground vent piping.
- A. SDR 35
 - B. Plastic SCH 40
 - C. Galvanized steel
 - D. Copper tube

17. According to the **Florida Plumbing Code**, offset is defined as _____.
- A. Two fixtures connected to the same branch
 - B. Two fixture branches with a common vent
 - C. Two changes of direction of a continuous pipe in series
 - D. Two 45 degree fittings to make up a ¼ degree bend
18. According to the **Florida Plumbing Code**, a drain on a commercial food storage unit shall be connected to the sanitary sewer through a/an _____.
- A. Deep seal trap and trap primer
 - B. Indirect waste
 - C. Accessible manhole
 - D. Floor drain with bucket
19. According to the **Florida Plumbing Code**, a commercial water closet (flushometer valve) shall have a minimum _____ water supply pipe.
- A. 3/8"
 - B. 1/2"
 - C. 3/4"
 - D. 1"
20. According to the **Florida Plumbing Code**, a circuit vent connected to a horizontal 4" sanitary waste line shall be _____ inches in diameter (minimum).
- A. 2"
 - B. 2 ½"
 - C. 3"
 - D. 4"
21. Given: 10" diameter, cast iron sanitary building drain. Find the minimum drop per 100 feet of horizontal run to be installed in accordance with the **Florida Plumbing Code**.
- A. 8 ¾"
 - B. 6.25"
 - C. 15 ¼"
 - D. 25"
22. According to the **Florida Plumbing Code**, 6" cleanouts installed in building drain lines shall be located not more than _____ feet apart.
- A. 50
 - B. 80
 - C. 100
 - D. 125

23. According to the **Florida Plumbing Code**, commercial laundries interceptor shall prevent solids _____ or larger from entering the drainage system.
- A. 1/8"
 - B. 1/4"
 - C. 3/8"
 - D. 1/2"
24. According to the **Florida Plumbing Code**, which of the following may be used as a drainage fitting?
- A. 4" short sweep ¼ bend in soil where change is from vertical to horizontal
 - B. Fittings having a hub in the direction opposite to flow, cut with a cold chisel
 - C. A straight tee
 - D. A fitting with running threads
25. The **Florida Plumbing Code** permits a vent to be installed a minimum of _____ from the trap weir on a 3" pipe.
- A. 2"
 - B. 4"
 - C. 6"
 - D. None of the above
-
26. According to the **Florida Plumbing Code**, combination waste and vent sanitary waste systems are limited to _____.
- A. Water closets/urinals
 - B. Floor drains/floor sinks
 - C. Dishwashers/washing machine waste
 - D. None of the above
27. According to the **Florida Plumbing Code**, a vertical vent connections off a horizontal 4" sanitary waste line, serving as a circuit vent for the fixtures, shall be no less than _____ inches in diameter.
- A. 1 1/4
 - B. 1 ½
 - C. 2
 - D. 2 ½
28. According to the **Florida Plumbing Code**, slip joints may be used _____.
- A. Only in extenuating circumstances
 - B. In P traps and exposed fixture supply only
 - C. On bathtub wastes when installed head to head
 - D. On the trap outlet, trap inlet and within the trap seal

29. According to the **Florida Plumbing Code**, 3" diameter building drains installed horizontally must fall a minimum of _____ per foot.
- A. 1/16"
 - B. 1/8"
 - C. 1/4"
 - D. 1/2"
30. According to the **Florida Plumbing Code**, vertical _____ shall be supported at the base and at each story level at intervals not exceeding 15 feet.
- A. Plastic pipe
 - B. Lead pipe
 - C. Cast iron soil pipe
 - D. Stainless Steel pipe
31. According to the **Florida Plumbing Code**, pipe fittings and _____ shall not be used in sanitary drainage plumbing systems.
- A. Are metallic
 - B. Have abnormal obstruction to flow
 - C. Are non-metallic
 - D. Are used to join pipes of dissimilar materials
-
32. According to the **Florida Plumbing Code**, building sewers 8" in diameter shall have _____.
- A. 8" clean-outs
 - B. Manholes
 - C. 4" clean-outs
 - D. 6" clean-outs
33. According to the **Florida Plumbing Code**, a 12" building sewer shall be provided with _____.
- A. Full-sized cleanouts located at 50' intervals
 - B. Full sized cleanouts located at 75' intervals
 - C. Full sized cleanouts located at 100' intervals
 - D. Manholes located at 400' intervals
34. According to the **Florida Plumbing Code**, a urinal in a public restroom shall be set not closer than _____ inches center to center with adjacent urinal fixtures.
- A. 20 inches
 - B. 22 inches
 - C. 24 inches
 - D. 30 inches

35. According to the **Florida Plumbing Code**, each domestic water heater or storage tank shall be provided with a _____ in a cold water supply inlet.
- A. Shut off valve
 - B. Flow pressure regulator
 - C. Approved back-flow protection device
 - D. Relief valve
36. According to the **Florida Plumbing Code**, a _____ shall not be used as a drainage fitting.
- A. Side-inlet quarter bend
 - B. 3 inch short sweep
 - C. Saddle type fitting
 - D. Double sanitary tee
37. According to the **Florida Plumbing Code**, all drainage and vent systems tested in sections with water shall be tested at a minimum of _____ (head water).
- A. 2 feet
 - B. 5 feet
 - C. 10 feet
 - D. 20 feet
-
38. According to the **Florida Plumbing Code**, water that is free from impurities is defined as _____ water.
- A. Treated water
 - B. Demineralized water
 - C. Potable water
 - D. Soft water
39. According to the **Florida Plumbing Code**, slip joints in a sanitary drain may be used on _____.
- A. Water closet connections
 - B. Lavatory trap seals
 - C. Wall hung urinals
 - D. Indirect fixture connections
40. According to the **Florida Plumbing Code**, an interceptor having a removable wire basket or similar device that will prevent foreign materials from passing into the public sewer shall be located _____.
- A. At commercial laundries
 - B. Where food waste grinders are installed
 - C. On direct chemical waste systems
 - D. At all restaurant or cafeteria toilets

41. According to the **Florida Plumbing Code**, commercial type food waste grinders shall have a/an _____ water supply.
- A. Hand-operated
 - B. Cold
 - C. Hose connected
 - D. Sterilized
42. According to the **Florida Plumbing Code**, commercial type dishwashing machines water supply shall be protected against _____ by an air gap.
- A. Backflow
 - B. Flooding
 - C. Indirect waste
 - D. Draining
43. According to the **Florida Plumbing Code**, the test pressure on a forced sewer connected to a pump with a discharge of 10 psi shall be _____.
- A. 10 psi
 - B. 15 psi
 - C. 20 psi
 - D. 25 psi
44. According to the **Florida Plumbing Code**, a 1-1/2 inch diameter building drainage pipe installed horizontally must fall a minimum of _____ feet every 144 feet.
- A. 2
 - B. 3
 - C. 4
 - D. 5
45. According to the **Florida Plumbing Code**, every indirect waste receptor shall be equipped with a/an _____.
- A. Vacuum breaker
 - B. Floor clean out
 - C. Basket or strainer
 - D. Automatic water supply

46. According to the **Florida Plumbing Code**, a _____ is a vent which receives the discharge from wastes other than water closets.
- A. Circuit vent
 - B. Loop vent
 - C. Common vent
 - D. Waste stack vent
47. According to the **Florida Plumbing Code**, the total number of fixture units for ten (10) floor drains with 4-inch traps is _____.
- A. 10 fixture units
 - B. 20 fixture units
 - C. 40 fixture units
 - D. 60 fixture units
48. According to the **Florida Plumbing Code**, which of the following types of facilities is the use of a grease interceptor recommended?
- A. Three bedroom house
 - B. Commercial food preparation facility
 - C. 40 unit office building
 - D. 80 unit motel
49. According to the **Florida Plumbing Code**, a retail store capable of serving 800 people should have _____ drinking fountain(s).
- A. 1
 - B. 2
 - C. 3
 - D. 4
50. According to the **Florida Plumbing Code**, safety pans for water heaters should be constructed of galvanized steel of _____ materials.
- A. 1/16 inch
 - B. 24 gauge
 - C. .218 inch
 - D. 1/8 inch
51. According to the **Florida Plumbing Code**, safety pans shall be no less than _____ deep.
- A. 3/4 inch
 - B. 1 inch
 - C. 1-1/4 inch
 - D. 1-1/2 inch

52. According to the **Florida Plumbing Code**, a _____ shall be installed in the pump or ejector discharge piping between the sump or ejector and the gravity drainage system.
- A. Check Valve
 - B. Flow control valve
 - C. Gate valve
 - D. Check and full open valve
53. According to the **Florida Plumbing Code**, the local vent for a bedpan washer shall not be less than a _____ inch diameter pipe.
- A. 1-1/2
 - B. 2
 - C. 2-1/2
 - D. 3
54. According to the **Florida Plumbing Code**, not more than _____ fixture(s) shall be served by a single flushing device.
- A. 1
 - B. 2
 - C. 3
 - D. 4
55. According to the **Florida Plumbing Code**, horizontal pvc piping shall be supported at not more than _____ foot intervals by hanger or support.
- A. 1
 - B. 2
 - C. 3
 - D. 4
56. According to the **Florida Plumbing Code**, water service lines shall in no case be less than _____ inch nominal diameter.
- A. 1/4
 - B. 3/8
 - C. 1/2
 - D. 3/4
57. According to the **Florida Plumbing Code**, a 1.6 flush water closet, public installation, with a 3" drain has a drainage fixture unit value of _____.
- A. 1
 - B. 4
 - C. 5
 - D. 6

58. According to the **Florida Plumbing Code**, vent stacks shall terminate independently above the roof of the building or shall be connected with the extension of the soil of the waste stack (stack-vent) at least _____ inches above the flood level rim of the highest fixture.
- A. 2
 - B. 4
 - C. 6
 - D. 8
59. According to the **Florida Plumbing Code**, a fixture trap shall have a water seal of not less than _____.
- A. 6 inches
 - B. 5 inches
 - C. 4 inches
 - D. 2 inches
60. According to the **Florida Plumbing Code**, a clean out installed on a 2" pipe shall have a/an _____ clearance for rodding.
- A. 6 inch
 - B. 8 inch
 - C. 12 inch
 - D. 18 inch
61. According to the **Florida Plumbing Code**, when it is not possible to install a water service pipe at least 12" above the top of a sewer line, the underground water service pipe and building sewer shall not be less than _____ inches apart horizontally.
- A. 12
 - B. 18
 - C. 24
 - D. 60
62. According to the **Florida Plumbing Code**, which of the following is an approved material for underground water distribution piping?
- A. Black steel
 - B. CPVC
 - C. Asbestos cement
 - D. PVC

63. According to the **Florida Plumbing Code**, a horizontal building drain 8" in diameter shall not drop less than _____ in 91 feet. Select the closest answer.
- A. 5-5/8"
 - B. 0.888"
 - C. 0.88"
 - D. 0.948"
64. According to the **Florida Plumbing Code**, food grinders used in commercial buildings, shall have an automatic water supply and shall be provided with not less than a _____ inch waste line.
- A. 1
 - B. 1-1/2
 - C. 2
 - D. 2-12
65. According to the **Florida Plumbing Code**, water moving at 90 gpm through a 1-1/4 tap will have a pressure loss of _____.
- A. 2.94 psi.
 - B. 4.90 psi.
 - C. 6.21 psi.
 - D. 6.94 psi.
66. According to the **Florida Plumbing Code**, in the process of disinfecting a portable water system using a solution containing 50 PPM of available chlorine it needs to stand for ____ hours before flushing.
- A. 6
 - B. 12
 - C. 18
 - D. 24
67. According to the **Florida Plumbing Code**, a drainage fixture unit with a continuous flow of 6 gallons per minute shall have a demand of _____ fixture unit.
- A. 2
 - B. 6
 - C. 8
 - D. 12

68. According to the **Florida Plumbing Code**, the minimum size building sewer required for a sanitary waste system with a connected load of 1,000 fixture units, installed at a fall of 1/16 of an inch per foot, is _____ inches.
- A. 4
 - B. 5
 - C. 6
 - D. 8
69. According to the **Florida Plumbing Code**, a horizontal relief vent for a fixture branch shall be installed at least _____ inches above the flood level rim of the fixture.
- A. 3
 - B. 4
 - C. 5
 - D. 6
70. According to the **Florida Plumbing Code**, the minimum size vent for a public water closet with a 1" flush valve is _____ inches.
- A. 1-1/4
 - B. 1-1/2
 - C. 2
 - D.

FLORIDA PLUMBING CODE 2017 - ANSWER KEY

Answer

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

Answer

28. D
29. B
30. C
31. B
32. B
33. D
34. D
35. A
36. C
37. C
38. C
39. B
40. A
41. B
42. A
43. B
44. B
45. C
46. D
47. B
48. B

FLORIDA PLUMBING CODE 2017 - ANSWER KEY

Answer

- 49. A
- 50. B
- 51. D
- 52. D
- 53. B
- 54. A
- 55. D
- 56. D
- 57. B
- 58. C
- 59. D
- 60. D
- 61. D
- 62. B
- 63. A
- 64. B
- 65. C
- 66. D
- 67. D
- 68. D
- 69. D
- 70. B

NFPA 99

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NFPA 99 - QUESTIONS

1. According to **NFPA 99** Health Care Facilities, the pressure relief valve, set at _____ above normal line pressure, to assure proper function of the system for Central System?
 - A. 25%
 - B. 40%
 - C. 60%
 - D. 50%

2. According to **NFPA 99** Health Care Facilities, which of the following statements is false with regard to surface mounted medical gas rail assemblies?
 - A. Assemblies shall be entirely visible.
 - B. Openings for station outlet assemblies shall be gas-specific.
 - C. Assemblies shall be made of materials with a melting point at least 550°C.
 - D. Station outlets or inlets shall not be placed on the ends of medical gas rails assemblies.

3. According to **NFPA 99** Health Care Facilities, when installing gas and vacuum systems, Purity test shall be continuously purged with _____ to prevent the formation of copper oxide on the inside surface of the joint.
 - A. Nitrogen
 - B. Flux
 - C. Dry Flux
 - D. Oil free dry nitrogen NF

4. According to **NFPA 99** Health Care Facilities, brazed joints shall be visually examined after cleaning of the outside of the joint. Which of the following is not true concerning joints that are found to be defective?
 - A. A joint must be replaced if there are cracks in the component.
 - B. A joint may be repaired no more than once.
 - C. A joint maybe repaired if there is flux residue.
 - D. A joint must be replaced if excessive oxidation of the joint is found.

5. According to **NFPA 99** Health Facilities, a device used for producing an aerosol of water and/or medication within inspired gas supply is known as a (an) _____.
 - A. Manifold
 - B. Oxidizer
 - C. Nebulizer
 - D. Isolator

6. According to **NFPA 99** Health Care Facilities, where bulk system cryogenic reserved vessels are used; they shall include a means to conserve the gas produced by the evaporation of the cryogenic liquid in the reserve vessel and discharge the gas into the line upstream of the _____ assembly.
- A. Final line filtering system
 - B. Final line regulator
 - C. Check valve
 - D. Manifold header
7. According to **NFPA 99** Health Care Facilities, medical dew point high alarm from each compressor site for master alarm system shall be monitored and alarmed to indicate the line pressure dew point above _____.
- A. +32°
 - B. +35°
 - C. +39°
 - D. +43°
8. According to **NFPA 99** Health Care Facilities, ventilation for Medical gas, central gas supply systems and storage of less than 3,000 cu. ft. total capacity shall be vented to the outside. If natural venting is used the vent opening(s) shall be a minimum of _____ in total free area.
- A. 65 sq. in.
 - B. 72 sq. in.
 - C. 85 sq. in.
 - D. 85 m
9. According to **NFPA 99** Health Care Facilities, when flow testing outlets, oxygen, nitrous oxide, and air outlets shall deliver 3.5 SCFM with a pressure drop of no more than _____psig.
- A. 2
 - B. 3
 - C. 4
 - D. 5
10. According to **NFPA 99** Health Care Facilities, the minimum ventilation rate for a class A chamber shall be _____ actual cubic feet per minute per occupant.
- A. 1
 - B. 2
 - C. 3
 - D. 4
11. According to **NFPA 99** Health Care Facilities, NFPA 99B refers to _____.
- A. Hazardous Chemicals Data
 - B. Standard for Hypobaric Facilities
 - C. Life Safety Code
 - D. Health Care Facilities

12. According to **NFPA 99** Health Care Facilities, medical gas cylinders of style M contain _____cubic inches.
- A. 293
 - B. 1337
 - C. 2370
 - D. 2660
13. According to **NFPA 99** Health Care Facilities, silk, wool, or _____ textile materials shall not be permitted in class A or B chambers.
- A. Synthetic
 - B. Nylon
 - C. Teflon
 - D. Polyester
14. According to **NFPA 99**, a portable fire extinguisher shall comply with _____.
- A. NFPA 14
 - B. NFPA 99
 - C. NFPA 58
 - D. NFPA 10
15. According to **NFPA 99** Health Care Facilities, the essential electrical system shall conform to a _____ system for Patients Care Spaces Category 1.
- A. Type 1 EES
 - B. Type 2 EES
 - C. Type 3 EES
 - D. Type 4 EES
16. According to **NFPA 99** Health Care Facilities, battery power lighting units shall be effective for at least _____hour(s).
- A. 1
 - B. 1.5
 - C. 2
 - D. 2.5
17. According to **NFPA 99** Health Care Facilities, precautionary signs for cylinders and container storage shall be readable from a distance of _____.
- A. 30 feet
 - B. 20 feet
 - C. 10 feet
 - D. 5 feet

18. According to **NFPA 99** Health Care Facilities, electrical equipment in an oxygen enriched atmosphere shall not have hot surfaces over _____.
- A. 545°F
 - B. 555°F
 - C. 573°F
 - D. 583°F
19. According to **NFPA 99** Health Care Facilities, pressures above 200 PSIG are called _____.
- A. Hypobaric
 - B. Vacuum
 - C. Ambient
 - D. High
20. According to **NFPA 99** Health Care Facilities, electrical wiring fixed systems of _____volts or less shall be ungrounded.
- A. 30
 - B. 20
 - C. 10
 - D. 0
21. According to **NFPA 99** Health Care Facilities, the component of impedance contributed by inductance or capacitance is known as _____.
- A. Endotrachel
 - B. Detonation
 - C. Ampacity
 - D. Reactance
22. According to **NFPA 99** Health Care Facilities, all brazed joints should have a brazing alloy exhibiting a melting temperature in excess of _____to retain the integrity of the piping system in the event of fire exposure.
- A. 800°F
 - B. 900°F
 - C. 1000°F
 - D. 360°F
23. According to **NFPA 99** Health Care Facilities, after installing a medical surgical vacuum system, it must have a standing pressure test for _____.
- A. 12 hours
 - B. 24 hours
 - C. 36 hours
 - D. 48 hours

24. According to **NFPA 99** Health Care Facilities, when storing cylinders or compressed gasses, the temperature of the cylinders shall not exceed _____.
- A. 120°F
 - B. 125°F
 - C. 135°F
 - D. 145°F
25. According to **NFPA 99** Health Care Facilities, the piping purity test performed on medical air piped gas systems cannot have a variation of more than _____ for Halogenated Hydrocarbons.
- A. 1 PPM
 - B. 2 PPM
 - C. 5 PPM
 - D. 10 PPM
-

NFPA 99 - ANSWERS

Answer

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

OSHA 1926

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OSHA STANDARDS FOR CONSTRUCTION INDUSTRY PART 1926

1. A contractor agrees with a subcontractor to divide job site responsibilities, such as providing safety programs, temporary sanitation facilities, etc. Which applies?
 - (A) This is not legal under OSHA rules.
 - (B) This is legal; however, the subcontractor and the contractor are held liable.
 - (C) This is legal; however, the contractor cannot be relieved of overall responsibility.
 - (D) The subcontractor can be held liable under OSHA rules.

2. The contractor has which responsibility in relation to hard hats?
 - (A) He must require their use and provide them to employees and subcontractors.
 - (B) He must require their use, but does not have to supply them.
 - (C) He does not need to require their use nor pay for them.
 - (D) None of the above.

3. The common drinking cup is_____.
 - (A) prohibited in hazardous areas
 - (B) prohibited in areas where more than 3 workmen will use the cup _____
 - (C) not prohibited
 - (D) always prohibited

4. What is the minimum number of urinals and toilet seats for 200 employees?
 - (A) 1
 - (B) 2
 - (C) 3
 - (D) 4

5. Exposure to impulsive or impact noise should not exceed pressure level _____dB peak sound
 - (A) 90
 - (B) 100
 - (C) 115
 - (D) 140

6. Eye protection near dangerous working conditions _____.

- (A) is required at the employee's cost
- (B) is required at the employer's cost
- (C) is not required, except by union regulations
- (D) is not required

7. Which of the following extinguishers will extinguish a Class B fire?

- (A) water type, foam, carbon dioxide
- (B) foam, carbon dioxide, dry chemical
- (C) water type, stored pressure, cartridge operated
- (D) soda acid, carbon dioxide, bicarbonate

8. Which of the following types of fire extinguishers will not extinguish a Class A fire?

- (A) water type
- (B) foam
- (C) soda acid
- (D) sodium

9. Room heaters (circulating type) are considered to be temporary heating devices, and as such, they should have minimum side clearances of _____, rear clearances of _____, and chimney connector clearances of _____.

- (A) 12" - 12' - 12"
- (B) 12" - 12" - 18"
- (C) 36" - 36" - 18"
- (D) 35" - 36" - 36"

10. An out of order tag will be identified by a _____.

- (A) white tag, white letters on red square
- (B) white tag, white letters on red oval with a black square
- (C) yellow tag, yellow letters on a black background
- (D) white tag, white letters on a black background

11. Brick stacks shall not be more than feet _____ in height.

- (A) 4
- (B) 6
- (C) 7
- (D) 16

12. Lumber piles shall not exceed _____ feet in height when handled manually.
- (A) 16
 - (B) 20
 - (C) 7
 - (D) 6
13. When masonry blocks are stacked higher than _____ feet, the stack shall be tapered back one-half block per tier above the 6' level.
- (A) 2
 - (B) 4
 - (C) 6
 - (D) 7
14. Whenever materials are dropped more than _____ to any point lying outside the exterior walls of the building, an enclosed chute of wood, or equivalent material, shall be used.
- (A) 10 feet
 - (B) 20 feet
 - (C) 30 feet
 - (D) 40 feet
15. When debris is dropped through holes in the floor without the use of chutes, the area onto which the material is dropped shall be completely enclosed with barricades not less than 42 inches high and not less than _____ feet back from the projected edge of the opening above.
- (A) 2
 - (B) 4
 - (C) 6
 - (D) 8
16. All pneumatically driven nailers, staplers, and other similar equipment provided with automatic fastener feed, which operate at more than _____ p.s.i. pressure at the tool, shall have a safety device on the muzzle to prevent the tool from ejecting fasteners unless the muzzle is in contact with the work surface.
- (A) 50
 - (B) 100
 - (C) 75
 - (D) 25

17. The use of electrical cords for hoisting or lowering shall _____.

- (A) be permitted
- (B) not be permitted
- (C) only be permitted during daylight hours
- (D) not be permitted during dusk or evening hours

18. A rest platform must be provided at intervals not to exceed _____ feet on scaffolds.

- (A) 15
- (B) 25
- (C) 35
- (D) 45

19. A crawling board is approved by OSHA. It is also known as a(an) _____.

- (A) chicken ladder
- (B) chicken board
- (C) movable platform
- (D) access ladder

20. The height of handrails shall be not more than _____ inches or less than _____ inches from upper surface of handrails to the surface of the tread, in line with face of riser or to surface of ramp.

- (A) 32 - 30
- (B) 34 - 28
- (C) 37 - 30
- (D) 34 - 32

21. All ladder jack scaffolds shall be limited to light duty and shall not exceed a height of _____ above the floor or ground.

- (A) 10 feet
- (B) 20 feet
- (C) 30 feet
- (D) 40 feet

22. Float or ship scaffolds shall have at least _____ supporting bearers.

- (A) 1
- (B) 2
- (C) 3
- (D) 4

23. Whenever there is danger of falling through an opening, it shall be guarded by a fixed guardrail system capable of sustaining the weight of a _____ pound person

- (A) 150
- (B) 175
- (C) 200
- (D) 225

24. Where a hazard exists to employees falling through wall openings, the opening shall be protected to a height of approximately _____ inches.

- (A) 36
- (B) 38
- (C) 42
- (D) 44

25. According to OSHA, a low-slope roof is a roof having a slope less than or equal to _____ in twelve.

- (A) 2
- (B) 4
- (C) 6
- (D) 8

26. According to OSHA, an opening measuring more than 2" in its least dimension in any floor, roof or platform through which materials may fall is a _____.

- (A) floor opening
- (B) platform
- (C) runway
- (D) hole

27. For lines rated 50 k.v. or below, a minimum clearance between the lines and any part of a crane or load shall be _____ feet.

- (A) 5
- (B) 10
- (C) 15
- (D) 20

28. Pneumatic-tired earthmoving equipment, whose maximum speed exceeds _____ mph, shall be equipped with fenders.
- (A) 5.0
 - (B) 7.5
 - (C) 10.0
 - (D) 15.0
29. All equipment used in site clearing shall be equipped with a roll-over canopy structure of not less than _____ inch steel plate, or 1/4 inch wire mesh with openings of no more than one inch.
- (A) 1/4
 - (B) 1/8
 - (C) 1/3
 - (D) 2/3
30. Excavated or other materials shall be effectively stored and retained at least _____ feet or more from the edge of the excavation.
- (A) 2
 - (B) 3
 - (C) 4
 - (D) 5
31. Banks of more than _____ feet shall be shored or laid back to a stable slope, or some other equivalent means of protection shall be provided where employees may be exposed to moving ground or cave-ins.
- (A) 2
 - (B) 4
 - (C) 5
 - (D) 7
32. When employees are required to be in trenches 4 feet deep or more, an adequate means of exit, such as a ladder or steps, shall be provided and located so as to require no more than _____ feet of lateral travel.
- (A) 10
 - (B) 15
 - (C) 25
 - (D) 30

33. According to OSHA, a kickout _____.

- (A) is the same as a trench jack
- (B) prevents the fall of a scaffold
- (C) relieves pressure from a tank
- (D) is an accidental release or failure of a cross brace

34. An employee is exposed to a noise decibel level of:

- 92 db for 2 hours
- 97 db for 1 hour
- 110 db for 1/8 of an hour

The equivalent noise exposure is _____.

- (A) in excess of unity and the employee cannot work under that condition
- (B) in excess of unity, but the employee can work under that condition
- (C) less than unity and the employee may work in that condition
- (D) less than unity and the employee cannot work in that condition

35. Which of the following problems is not caused by asbestos?

- (A) lung cancer
- (B) gastrointestinal cancer
- (C) asbestosis
- (D) angina

36. Medium duty scaffolds shall be capable of supporting a working load not to exceed _____ pounds per square foot.

- (A) 25
- (B) 50
- (C) 75
- (D) 100

37. Given the information below, will the sling carry the 840 pound pipe?

- 1/4" improved plow steel rope (IWRC)
- single leg sling (M.S.)

- (A) yes, but only if the pipe were 800 pounds
- (B) yes, the sling will carry the 840 pound pipe
- (C) no, the pipe is 45 pounds too heavy
- (D) no, the sling will not carry more than 760 pounds

38. Oxygen cylinders, regulators, hoses, and fittings shall be kept away from _____. as per OSHA.

- (A) ventilation
- (B) a manifold
- (C) quick closing valves
- (D) oil and grease

39. A cohesive soil with an unconfirmed compressive strength of 1.5 ton per square foot or greater is classified as _____.

- (A) Type A
- (B) Type B
- (C) Type C
- (D) Type D

40. The trench excavation is made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench is not greater than _____ feet.

- (A) 8
- (B) 10
- (C) 13
- (D) 15

41. The minimum illumination in active general construction storage areas is _____.

- (A) 3 foot-candles
- (B) 5 foot-candles
- (C) 10 foot-candles
- (D) 30 foot-candles

42. The maximum allowable slope for excavations less than 20 feet in depth for Type C soil is _____.

- (A) 3/4 horizontal to 1 vertical
- (B) 1 horizontal to 1 vertical
- (C) 1 1/2 horizontal to 1 vertical
- (D) 2 horizontal to 1 vertical

43. Oxygen deficiency can reasonably be expected to exist in excavations in landfill areas. The atmospheres in the excavation shall be tested before employees enter excavations with a depth greater than _____ feet.

- (A) 4
- (B) 6
- (C) 8
- (D) 9

44. What is the volume of material to be excavated from a trench with a bottom dimension of 4' x 20'? The trench is 8' deep and is in loamy sand. (Sides and ends are sloped.)

- (A) less than 160 cubic yards
- (B) 160 to 170 cubic yards
- (C) 170 to 180 cubic yards
- (D) more than 180 cubic yards

45. If a trench with a bottom dimension of 5' x 80' which is 4' deep is dug in a sandy clay with the 5' ends shored, what is the volume of excavation removed?

- (A) less than 90 cubic yards
- (B) 90 to 100 cubic yards
- (C) 101 to 110 cubic yards
- (D) more than 110 cubic yards



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OSHA STANDARDS FOR CONSTRUCTION INDUSTRY PART 1926

ANSWER

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

- 25. B
- 26. D
- 27. B
- 28. D
- 29. B
- 30. A
- 31. C
- 32. C
- 33. D
- 34. C
- 35. D
- 36. B
- 37. B
- 38. D
- 39. A
- 40. D
- 41. A
- 42. C
- 43. A
- 44. A
- 45. B

CHAPTER 64E-6



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CHAPTER 64E-6: QUESTIONS

1. According to Florida Rules: **Chapter 64E-6**, if building construction has commenced, for how many additional days past the eighteen month expiration date, shall a sewage system permit be valid?
 - A. None
 - B. 30
 - C. 60
 - D. 90

2. According to Florida Rules: **Chapter 64E-6**, when determining a soil absorption profile for application for a sewage disposal system, soil samples shall be taken at a depth of _____?
 - A. 3'
 - B. 5'
 - C. 6'
 - D. 10'

3. According to the Florida Rules: **Chapter 64E-6**, when a sewage disposal application variance is requested from the county, the request shall be made on what form?
 - A. DH 3143
 - B. DH 3144
 - C. DH 4057
 - D. DH 3145

4. According to Florida Rules: **Chapter 64E-6**, a septic system shall be placed no closer than how many feet to a non-potable water well?
 - A. 15'
 - B. 50'
 - C. 75'
 - D. 100'

5. According to Florida Rules: **Chapter 64E-6**, what is the closest allowable distance between any part of an onsite sewage treatment and disposal system and a private potable well?
 - A. 25 ft.
 - B. 75 ft.
 - C. 125 ft.
 - D. 175 ft.

6. According to Florida Rules: **Chapter 64E-6**, what is the minimum distance between a septic tank that serves a facility with an estimated sewage flow of 2,000 gallons or less per day and a public drinking water well?
- A. 50'
 - B. 75'
 - C. 100'
 - D. 150'
7. According to Florida Rules: **Chapter 64E-6**, when a private potable well is utilized, the maximum daily sewage flow is multiplied by _____gallons per acre per day.
- A. 1,000
 - B. 1,500
 - C. 2,000
 - D. 2,500
8. According to Florida Rules: **Chapter 64E-6**, when designing a drain field what is the absorption unobstructed land area in relationship to the drain field?
- A. 1.5
 - B. 2.0
 - C. 2.5
 - D. 3.0
-
9. According to Florida Rules: **Chapter 64E-6**, drain field systems shall not be located within how many feet of an unsleeved potable water line?
- A. No requirement
 - B. 5'
 - C. 10'
 - D. 15'
10. According to the Florida Rules: **Chapter 64E-6**, a sewage disposal system shall not be located laterally within how many feet of the boundaries of surface water bodies?
- A. 25'
 - B. 50'
 - C. 75'
 - D. 100'
11. According to Florida Rules: **Chapter 64E-6**, the estimated sewage flow for a 24 hr service station with three water closets would be _____gallons per day.

- A. 975
B. 750
C. 325
D. 250
12. According to the Florida Rules: **Chapter 64E-6**, private sewage disposal systems having sewage flows of 700 gallons per day shall have a tank capacity of _____?
- A. 1,050 gallons
B. 1,200 gallons
C. 1,350 gallons
D. 1,500 gallons
13. According to the Florida Rules: **Chapter 64E-6**, what form is required before a service person can remove the contents of a portable holding tank or other receptacle associated with onsite sewage treatment and disposal system?
- A. DH 4012
B. DH 4013
C. DH 4015
D. DH 4016
14. According to Florida Rules: **Chapter 64E-6**, the minimum required treatment capacity (gallons per day) for a 3,300 square foot, 5 bedroom residence utilizing an aerobic treatment system is _____?
-
- A. 600 gallons
B. 700 gallons
C. 800 gallons
D. 900 gallons
15. According to Florida Rules: **Chapter 64E-6**, septic tank access covers for aerobic treatment systems treating 1,500 gallons or less per day shall weigh no less than _____ before they are considered child resistant?
- A. 50 pounds
B. 55 pounds
C. 58 pounds
D. 65 pounds
16. According to Florida Rules: **Chapter 64E-6**, the lid of a concrete septic tank subject to non-traffic residential installation shall be capable of supporting a concentrated maximum load of _____ located at the center of the tank lid.
- A. 1,000 lbs
B. 1,750 lbs
C. 2,000 lbs
D. 875 lbs

17. According to Florida Rules: **Chapter 64E-6**, the minimum liquid compartment depth of grease interceptors and septic tanks for onsite waste water treatment is _____?
- A. 30"
 - B. 40"
 - C. 60"
 - D. 42"
18. According to Florida Rules: **Chapter 64E-6**, an onsite septic tank has liquid depth of 48" is utilizing a 4" diameter vented inlet tee. What is the maximum distance that the vented inlet tee can extend below the liquid surface?
- A. 12.5"
 - B. 15.84"
 - C. 16"
 - D. 18"
19. According to Florida Rules: **Chapter 64E-6**, lids for aerobic treatment units shall be a minimum of how many pounds for treatment units treating 1500 gallons per day or less.
- A. 50 pounds
 - B. 55 pounds
 - C. 58 pounds
 - D. 65 pounds
-
20. According to Florida Rules: **Chapter 64E-6**, in establishments where grease waste is produced in such quantities that could otherwise cause line stoppage or hinder sewage disposal a _____ shall be installed.
- A. Grease trap
 - B. Grease Interceptor
 - C. Grease bypass
 - D. Metering device
21. According to Florida Rules: **Chapter 64E-6**, what is the minimum depth of the coarse aggregate under the distribution pipe in a drain field system?
- A. 4 inches
 - B. 6 inches
 - C. 10 inches
 - D. 12 inches
22. Which one of the following conditions pertaining to the repair of a failing septic system will not require additional permit information beyond that which is required by Florida Rules: **Chapter 64E-6**?
- A. Hydrogen peroxide treatment
 - B. Drain field replacement or addition drain field lines
 - C. High pressure air injection
 - D. Introduction of any chemical into the system

23. According to Florida Rules: **Chapter 64E-6**, in construction of a sewage disposal systems with gravity fed drain fields, drain lines shall not exceed _____?
- A. 25'
 - B. 70'
 - C. 75'
 - D. 100'
24. According to Florida Rules: **Chapter 64E-6**, before beginning repairs on a failing onsite sewage treatment and disposal system you must obtain written approval from the:
- A. Owners
 - B. DOH county health department
 - C. Local plumbing authority
 - D. Registered engineer
25. According to Florida Rules: **Chapter 64E-6**, soil and texture classified as medium sand has a diameter limit of how many millimeters?
- A. Less than .01
 - B. Between .01 and .24
 - C. Between .50 and .25
 - D. More than 1.00
-

CHAPTER 64E-6: ANSWERS

Answer

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

PLUMBERS HANDBOOK



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PLUMBERS HANDBOOK: QUESTIONS

1. According to the **Plumber's Handbook**, a circuit vent rises vertically from between the _____ located on a horizontal branch drain and connects to the _____.
 - A. Lowest fixtures... Vent stack
 - B. Lowest fixtures... Horizontal vent
 - C. Last two fixture traps... Vent stack
 - D. Last two fixture traps... Stack vent

2. According to the **Plumber's Handbook**, the air gap must be a minimum of _____ above the flood level rim of a floor sink.
 - A. 1 ½
 - B. Half the drain pipe size
 - C. Twice the size of the beehive strainer
 - D. 1" or twice the drain pipe size

3. According to the **Plumber's Handbook**, all of the following are true except:
 - A. A change in direction from the horizontal to horizontal may be made with a wye and a 1/8 bend
 - B. A change in direction may never be made with a fitting with an enlarged chamber which might obstruct the drain flow
 - C. A change in direction from horizontal to vertical may never be made with a ¼ bend
 - D. A change in direction from the vertical to horizontal may be made with a combination or reducing closet bend

4. According to the **Plumber's Handbook**, a temperature relief valve will release at a temperature of _____.
 - A. 150 psi
 - B. 210°F
 - C. 210°C
 - D. 150 kPa

5. According to the **Plumber's Handbook**, standard pipe thread has a taper of _____ per foot.
 - A. 2.5 cm
 - B. ¾"
 - C. 1/8"
 - D. 1/16"

6. According to the **Plumber's Handbook**, the free area of a shower strainer must be a minimum of _____ inches.
- A. 1 ½
 - B. 2 ½
 - C. 3 ½
 - D. 4 ½
7. According to the **Plumber's Handbook**, water closets must have a minimum spacing of _____ inches center-to-center when set in battery installations.
- A. 21
 - B. 24
 - C. 30
 - D. 36
8. According to the **Plumber's Handbook**, water closets must have a minimum of _____ inches from the center of the bowl to the outside edge of a tub apron.
- A. 24
 - B. 12
 - C. 8
 - D. 6
9. According to the **Plumber's Handbook**, the minimum dimensions for a handicapped toilet room are _____.
- A. 2 feet by 3 feet
 - B. 3 feet by 4 feet, 4 inches
 - C. 3 feet by 4 feet, 8 inches
 - D. 5 feet by 5 feet
10. According to the **Plumber's Handbook**, the recommended hot water (gas type) tank size for a 4 bedroom home is _____ gallons.
- A. 20
 - B. 40
 - C. 52
 - D. 60
11. According to the **Plumber's Handbook**, one watt equals _____ B.T.U.s.
- A. 3.4
 - B. 3.6
 - C. 3.8
 - D. 4

12. According to the **Plumber's Handbook**, a water service pipe must be placed in a separate trench from that of the sewer pipe and must be separated by at least _____.
- A. 5
 - B. 10
 - C. 15
 - D. 20
13. According to the **Plumber's Handbook**, a 2-inch pipe requires the use of a _____ inch pipe wrench.
- A. 6 or 8
 - B. 10
 - C. 14
 - D. 24
14. According to the **Plumber's Handbook**, sand filters used for swimming pools must have a back wash rate of not less than _____g.p.m. per square foot of filter area.
- A. 10
 - B. 12
 - C. 14
 - D. 16
15. According to the **Plumber's Handbook**, the minimum size waste and overflow for bathtubs is _____ inch(es).
- A. 1
 - B. 1 ½
 - C. 2
 - D. 3
16. According to the **Plumber's Handbook**, if the size of the fixture drain is 1-1/2", the maximum distance of the fixture trap from the vent opening is _____. (Based on the International Plumbing Code).
- A. 2
 - B. 3
 - C. 4
 - D. 6
17. According to the **Plumber's Handbook**, accessible clean outs are required for all building sewers and separation distances cannot exceed _____ feet.
- A. 25
 - B. 50
 - C. 75
 - D. 100

18. According to the **Plumber's Handbook**, cast-iron soil pipes (5-foot lengths) with lead and oakum joints must be supported with hangers or other approved means at not less than _____ foot intervals.
- A. 2
 - B. 3
 - C. 4
 - D. 5
19. According to the **Plumber's Handbook**, a four bedroom home is required to have a septic tank with a minimum capacity of _____ gallons.
- A. 750
 - B. 900
 - C. 1050
 - D. 1200
20. According to the **Plumber's Handbook**, a _____ is a vertical section of pipe of a plumbing system that receives the discharge of water closets, with or without the discharge from other fixtures, and conveys this waste substance, usually to the building drain.
- A. Soil Pipe
 - B. Fixture Branch
 - C. Horizontal Branch
 - D. Fixture Drain
-
21. According to the **Plumber's Handbook**, a stack vent is nothing more than the extension of a _____ above the highest horizontal drain.
- A. Loop Vent
 - B. Soil Stack
 - C. Soil Pipe
 - D. Main Vent

PLUMBERS HANDBOOK: ANSWERS

Answer

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

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NFPA 14



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NFPA 14: QUESTIONS

1. According to the **NFPA-14**, the design of class I standpipes shall be at least _____ inches in size.
 - A. 2"
 - B. 2 ½"
 - C. 3"
 - D. 4"
 - E. 5"

2. According to the **NFPA-14**, the design of the pressure limitation for the pipe and tube used in standpipe systems shall not exceed _____ at any point.
 - A. 22 bar
 - B. 24 bar
 - C. 300 psi
 - D. 250 psi
 - E. 170 psi

3. According to the **NFPA-14**, to accept a newly installed standpipe which is to operate at a maximum pressure of the 150 psi is to be tested at a minimum pressure of _____ pounds per square inch.
 - A. 150 psi
 - B. 160 psi
 - C. 180 psi
 - D. 200 psi
 - E. 250 psi

4. According to the **NFPA-14**, the components of the fire department connections require _____ 2-1/2 inch internal threaded swivel fittings.
 - A. 5
 - B. 4
 - C. 3
 - D. 2
 - E. 1

5. According to the **NFPA-14**, when installing the fire department hose connection it shall be on the street side of buildings and have a sign reading _____.
 - A. Fire Department Hose Connection
 - B. Standpipe
 - C. Fire Pipe
 - D. Fire
 - E. Hose Connection

NFPA 14: ANSWERS

Answer

1. D
2. B
3. D
4. D
5. B

SOLAR WATER AND POOL HEATING



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SOLAR WATER AND POOL HEATING MNUAL: QUESTIONS

1. According to the **Solar Water and Pool Heating Manual**, a _____ collector captures the sun's electromagnetic energy and converts it to heat energy.
 - A. Solar
 - B. Focusing
 - C. Flat-Plate
 - D. Tracking
 - E. None of The Above

2. According to the **Solar Water and Pool Heating Manual**, the average value in Florida, at about sea level, we receive a maximum of _____ btuh/ft² hr at high noon the day of the summers equinox.
 - A. 295
 - B. 300
 - C. 428
 - D. 746
 - E. 836

3. According to the **Solar Water and Pool Heating Manual**, in Orlando the seasonal variation is approximately _____ latitude.
 - A. 18 degrees
 - B. 28 degrees
 - C. 38 degrees
 - D. 48 degrees
 - E. 56 degrees

4. According to the **Solar Water and Pool Heating Manual**, which of the following concerning heat loss in a pool is incorrect?
 - A. Up to 70 percent of a swimming pools heat energy loss results from evaporation.
 - B. Evaporation losses are directly proportional to wind velocities at the pool surface.
 - C. Evaporative losses are higher from cool pools than from warmer pools.
 - D. As much as 20 percent of a swimming pools thermal energy is caused by convection
 - E. None of the above is a correct statement.

5. According to the **Solar Water and Pool Heating Manual**, the purpose of a system components check valve is to prevent _____?
- A. Forward-flowing
 - B. Back-flowing
 - C. Being pumped
 - D. Thermo siphoning action
 - E. Over-flowing
6. According to the **Solar Water and Pool Heating Manual**, the factor for standby heat loss from a hot water system storage tank when insulated in one inch of foam, (as in insulated tanks R-8-9) is _____.
- A. 1.00
 - B. 1.20
 - C. 1.18
 - D. 1.30
 - E. 1.32
7. According to the **Solar Water and Pool Heating Manual**, a four-bedroom home with 5 people should have a water system, a water heater tank to accommodate the use of _____ gallons of hot water per day.
-
- A. 20
 - B. 40
 - C. 80
 - D. 85
 - E. 100

SOLAR WATER AND POOL HEATING MNUAL: ANSWER

Answer

1. A
 2. B
 3. B
 4. C
 5. D
 6. B
 7. D
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FLORIDA FUEL GAS CODE 2017

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FLORIDA FUEL GAS CODE 2017: QUESTIONS

1. According to the **Florida Gas Code**, outdoor combustion air opening for two 100,000 btu appliances when directly communication with the outside should be a minimum _____.
 - A. 10 sq" total
 - B. 25 sq" total
 - C. 30 sq" total
 - D. 50 sq" total
2. According to the **Florida Gas Code**, a schedule 40 metallic propane gas pipe with an inlet pressure of 2.0 psi and a pressure drop of 1.0 psi, that is 125' long and has 4,518,000 btu's is required to be _____ size.
 - A. 1"
 - B. 1 ¼"
 - C. 1 ½"
 - D. 2"
3. According to the **Florida Gas Code**, the curve radius of plastic pipe shall not be less than _____ times the inside diameter of the pipe.
 - A. 5
 - B. 10
 - C. 20
 - D. 25
4. According to the **Florida Gas Code**, which of the following statements is incorrect?
 - A. Piping may support other piping
 - B. Piping shall; be supported by to prevent excessive vibration
 - C. Piping may be supported with brackets
 - D. Piping shall be installed so as not to interfere with the free expansion and contraction of the piping.
5. According to the **Florida Gas Code**, to control the flow of gas where an appliance operates at a lower pressure than the supply pressure a _____ regulator is required.
 - A. Mp
 - B. Draft
 - C. Pressure
 - D. Gas appliance

6. According to the **Florida Gas Code**, what size type “B” double wall vent would be required for a single category 1 appliance with a single wall metal connector, that is ten feet high and five feet lateral at 115,000 btu’s with natural ventilation.
- A. 3”
 - B. 4”
 - C. 5”
 - D. 6”
7. According to the **Florida Gas Code**, in nonload – bearing partitions a hole may be bored not greater than _____ of the whole stud.
- A. 25%
 - B. 40%
 - C. 60%
 - D. 75%
8. According to the **Florida Gas Code**, a two and one half inch field threaded metallic pipe, _____ treads are required.
- A. 10
 - B. 11
 - C. 12
 - D. 13
9. According to the **Florida Gas Code**, the minimum clearance from the top of an open-top broiler unit to the ventilation hood is _____ inches,
- A. 24
 - B. 28
 - C. 32
 - D. 36
10. According to the **Florida Gas Code**, when testing the piping system the minimum test pressure shall not be less than _____ psi.
- A. 3
 - B. 30
 - C. 125
 - D. Twice the working pressure

FLORIDA GAS CODE 2017: ANSWERS

Answer

1. D
2. B
3. D
4. A
5. C
6. C

7. C
8. C
9. A
10. A

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FLORIDA ACCESSIBILITY CODE 2014



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FLORIDA ACCESSIBILITY CODE: QUESTIONS

1. Per **Florida Accessibility Code** what is the height for a drinking fountain spout above the finish floor?
 - A. 24"
 - B. 36"
 - C. 40"
 - D. No minimum if a cup dispenser is provided

2. **Florida Accessibility Code:** In a sauna or steam room that has a removable bench it may obstruct the required turning space_____
 - A. At no time
 - B. No more than six inches
 - C. At any time
 - D. Turning space is not required

3. Per Florida Accessibility Code a minimum length of the grab bar behind the water closet is_____
 - A. 18"
 - B. 24"
 - C. 30"
 - D. 36"

4. Per **Florida Accessibility Code** what is the minimum depth of a stall type urinal from the rim to back of fixture?
 - A. 13 ½"
 - B. 12"
 - C. 17"
 - D. None of the above

5. Per **Florida Accessibility Code** what is the minimum toilet seat height serving children ages 3 and 4
 - A. 10-11"
 - B. 12-15"
 - C. 11-12"
 - D. 15-16"

6. Per **Florida Accessibility Code** what is the minimum distance to the center line of a water closet to a side wall in an ambulatory compartment.
- A. 15"
 - B. 16"
 - C. 17"
 - D. 18"
7. Per **Florida Accessibility Code** a hand operated metering faucet shall remain open for a minimum of _____ seconds.
- A. 10
 - B. 12
 - C. 15
 - D. 18
8. Per **Florida Accessibility Code** In new construction the required lavatory shall be a minimum _____ inches wide.
- A. 12 inches
 - B. 15 inches
 - C. 18 inches
 - D. 19 inches
9. Per **Florida Accessibility Code** a mirror above a lavatory is required to be a maximum of _____ inches.
- A. 40 inches
 - B. 42 inches
 - C. 35 inches
 - D. 36 inches
10. Per **Florida Accessibility Code** the minimum PSI to operate a flush control for any fixture shall not exceed _____.
- A. 5
 - B. 10
 - C. 15
 - D. 20

FLORIDA ACCESSIBILITY CODE 2014: ANSWERS

ANSWER

1. B
 2. C
 3. B
 4. A
 5. C
 6. C
 7. A
 8. D
 9. A
 10. A
-

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FLORIDA RESIDENTIAL CODE 2017



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FLORIDA (RESIDENTIAL) CODE 2017 - QUESTIONS

1. A subsoil storm drain sump pit shall not be at least _____ inches deep and _____ inches in diameter.
(A) 24 - 18
(B) 18 - 18
(C) 18 - 24
(D) 24 – 24
2. A subsoil storm drain sump pit shall not be at least _____ inches deep and _____ inches in diameter.
(A) 24 - 18
(B) 18 - 18
(C) 18 - 24
(D) 24 – 24
3. The minimum plumbing fixture trap size for a shower head with more than 12.3 gpm up to 25.8 gpm flow rate is _____.
(A) 1.5
(B) 2.0
(C) 3.0
(D) 4.0
4. The load on DWV-system piping shall be computed in terms of drainage fixture unit values. For a full bath group with bathtub and 1.6 gallon per flush water closet the d.f.u value is _____.
(A) 3
(B) 4
(C) 5
(D) 6
5. Shower receptors lined by hot mopping shall be built-up with not less than _____ layers of standard grade Type 15 asphalt-impregnated roofing felt.
(A) 2
(B) 3
(C) 4
(D) 5
6. Shower control valves shall be equipped with control valves of any of the following types except _____.
(A) thermostatic-mixing
(B) pressure-balance
(C) limited temperature
(D) pressure balanoe/thermostatic-mixing combination
7. Vent terminals extending through the wall shall terminate a minimum of _____ feet from the lot line and feet _____ above the adjacent grade.
(A) 10 - 10
(B) 12 – 12
(C) 10 - 12
(D) 12 – 10

8. Required pans for installed water heaters or hot water storage tanks shall be made of _____ gage galvanized steel or other metal, and not less than _____ inches deep.
- (A) 0.0360 - 1
 - (B) 0.6010- 1 1/2
 - (C) 0.0160- 1 1/4
 - (D) 0.0236- 1 ½
9. Gravity sewer tests shall consist of plugging the end of the building sewer at the point of connection with the public sewer, completely filling the building sewer with water, and pressurizing the sewer to not less than 5-foot head of water. The test pressure shall not decrease during a period of at least _____ minutes.
- (A) 10
 - (B) 15
 - (C) 20
 - (D) 25
10. Lots shall be graded to drain surface water away from foundation walls. The grade shall fall a minimum of _____ inches within the first 10 feet.
- A. 4
 - B. 6
 - C. 8
 - D. 10
11. When the waste water from a private swimming pool is to be disposed of through a public sewer, a _____ shall be installed on the lower terminus of the building drain and the tall piece from the trap shall extend a minimum of 3 inches above finished grade and below finished floor grade.
- (A) 2-inch P-trap
 - (B) 2 1/2-inch P-trap
 - (C) 3-inch P-trap
 - (D) 4-inch P-trap
12. Solar system components that might be subjected to pressure drops below atmospheric pressure during operation or shutdown shall be protected by a _____.
- (A) vacuum-relief valve
 - (B) pressure-release valve
 - (C) pressure shut-off valve
 - (D) vacuum shut-off valve
13. The horizontal run of a listed connector to a natural draft chimney shall not exceed _____ of the height of the vertical portion of the chimney above the connector.
- (A) 50%
 - (B) 75%
 - (C) 87%
 - (D) 100%

14. The installation of a listed and labeled cooking appliance or microwave oven over a listed and labeled cooking appliance shall conform to the terms of the upper appliance's listing and label and the manufacturer's installation instructions. The microwave oven shall conform to _____.
- (A) UL 923
 - (B) UL 2158A
 - (C) UL 631
 - (D) UL 4518M
15. Footings for masonry fireplaces and their chimneys shall be constructed of concrete or solid masonry at least _____ inches thick and shall extend at least 6 inches beyond the face of the fireplace or foundation wall on all sides.
- (A) 8
 - (B) 10
 - (C) 12
 - (D) 16
16. Where a spark arrestor is installed on a masonry chimney, the spark arrestor shall meet all of the following requirements except _____.
- (A) the net free area of the arrestor shall not be less than four times the net free area of the outlet of the chimney flue it serves
 - (B) the arrestor screen shall have heat and corrosion resistance equivalent to 19-gage galvanized steel or 24-gage stainless steel
 - (C) openings shall not permit the passage of spheres having a diameter greater than 1/4 inch nor block the passage of spheres having a diameter less than 3/8 inch
 - (D) the spark arrestor shall be accessible for cleaning and the screen or chimney cap shall be removable to allow for cleaning of the chimney flue
17. Weepholes shall be provided in the outside wythe of masonry walls and shall not be less than _____ in diameter and shall be located immediately above the flashing.
- (A) 3/8 inch
 - (B) 1/2 inch
 - (C) 5/16 inch
 - (D) 3/16 inch
18. Screws for attaching gypsum board to cold-formed steel framing shall be _____ in accordance with ASTM C 1002 and shall penetrate the steel not less than 3/8 inch.
- (A) Type W
 - (B) Type S
 - (C) Type N
 - (D) Type D

- 19 . Hollow glass units shall be partially evacuated and have a minimum average glass face thickness of 3/16 inch. The surface of units in contact with mortar shall be treated with _____.
- (A) a polyvinyl butyral coating or latex-based paint
 - (B) white vinegar or vinyl sealant
 - (C) latex undercoat or thinset
 - (D) self-adhesive polyvinyl or vinyl undercoat
20. Notches in solid lumber joists, rafters and beams shall not exceed _____ of the depth of the member, shall not be longer than _____ of the depth of the member and shall not be located in the middle one-third of the span.
- (A) 1/4 - 1/3
 - (B) 1/3 - 1/2
 - (C) 1/6 - 1/3
 - (D) 1/6 - 1/4
21. The minimum specified compressive strength of concrete shall not be less than 2500 psi at _____ days in buildings assigned
- (A) 30
 - (B) 28
 - (C) 20
 - (D) 14
22. Any glazing material is permitted to be installed without screening in the sloped areas of greenhouses, provided the greenhouse height at the ridge does not exceed _____ above grade.
- (A) 10 feet
 - (B) 15 feet
 - (C) 20 feet
 - (D) 25 feet
23. If soil treatment is used for subterranean termite prevention, chemical soil treatments shall also be applied under all exterior concrete or grade within _____ of the primary residential structure sidewalls.
- (A) 4'
 - (B) 3'
 - (C) 2'
 - (D) 1'
24. Intersecting masonry walls, other than interior non-load-bearing walls, shall be anchored at vertical intervals of not more than _____ inches with joint reinforcement of not less than 9 gage galvanized mesh hardware cloth.
- (A) 8
 - (B) 16
 - (C) 18
 - (D) 30

25. In residential construction, wood structural panel sheathing shall be fastened to roof framing with a specific gravity of $0.42 \leq G \leq 0.49$, spacing of ring shank fasteners shall be _____ inches in center in nailing zone 3, where design speed winds are at least 165mph.
- (A)12
 - (B)8
 - (C)6
 - (D)4
26. A _____ is a structural sandwich panel that consists of a light-weight foam plastic core laminated between two thin rigid wood structural panel facings.
- (A) thermal insulation plane
 - (B) solar heat gain coefficient wall
 - (C) structural insulated panel
 - (D) vapor permeable membrane
27. Where a combination water heater-space heating system requires water for space heating at temperatures exceeding _____, a master thermostatic mixing valve complying with ASSE 1017 shall be installed to temper the water for domestic uses.
- (A) 140°F
 - (B) 145°F
 - (C) 150°F
 - (D) 155°F
28. Average dead load for structures assigned to Seismic Design Category C shall not exceed _____ pounds per sq. foot for the combined roof and ceiling.
-
- (A)15
 - (B)13
 - (C)17
 - (D)20
29. In areas where expansive or collapsible soils are known to exist, all dwellings shall have a controlled method of water disposal from roofs that will collect and discharge roof drainage to the ground surface at least _____ feet from foundation walls or to an approved drainage system.
- (A)4
 - (B)5
 - (C)6.5
 - (D)7
30. The minimum horizontal area of a window well shall be 9 square feet, with a minimum horizontal projection and width of _____. The area of the window well shall allow the emergency escape and rescue opening to be fully opened.
- (A) 24 inches
 - (B) 30 inches
 - (C) 36 inches
 - (D) 44 inches

FLORIDA (RESIDENTIAL) 2017 CODE - ANSWER

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

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FLORIDA MECHANICAL CODE 2017

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FLORIDA MECHANICAL CODE 2017: QUESTIONS

1. According to the FLORIDA MECHANICAL CODE, a condensate drainpipe for a fuel burning appliance must slope in the direction of discharge not less than _____.

- (A) 1%
- (B) 1.5%
- (C) 2%
- (D) 2.5%

2. According to the FLORIDA MECHANICAL CODE, the lining of supply air duct shall be interrupted for a minimum of _____ downstream from an electric duct heater.

- (A) 2"
- (B) 4"
- (C) 6"
- (D) 8"

3. A pipe in a hydronic piping system, in which the exterior temperature exceeds 250°F, shall have a minimum clearance of _____ to combustible materials.

- (A) 1 inch
- (B) 2 inches
- (C) 3 inches
- (D) 4 inches

4. According to the FLORIDA MECHANICAL CODE, every exhaust outlet for grease ducts serving Type I hoods, which is located above the roof, shall terminate at least _____ above the roof surface.

(A) 36 inches

(B) 38 inches

(C) 40 inches

(D) 42 inches

5. According to the FLORIDA MECHANICAL CODE, a dry cleaning plant that uses combustible liquid solvents having a flash point at or above 140 ° F is _____.

(A) Type I

(B) Type II

(C) Type III

(D) Type IV

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6. According to the FLORIDA MECHANICAL CODE, outlets for exhaust that Exceed _____ shall be designed as a chimney.

(A) 300°F

(B) 400°F

(C) 500°F

(D) 600°F

7. Refer to the FLORIDA MECHANICAL CODE. A contractor is to install a back shelf-type kitchen range hood in a facility which has 18 linear feet of cooking surface. If the hood is Type 1 and used for a medium-duty cooking appliance, a _____ exhaust fan will be required. Select the closest answer.
- (A) 4,200 cfm
 - (B) 4,600 cfm
 - (C) 5,000 cfm
 - (D) 5,400 cfm
8. According to the FLORIDA MECHANICAL CODE, a low-pressure steam heating boiler is one which operates at a pressures not exceeding ____psi
- (A) 5
 - (B) 10
 - (C) 15
 - (D) 25
9. Exhaust outlets that terminate through noncombustible exterior walls shall not be located within _____ of other exterior openings. Refer to the FLORIDA MECHANICAL CODE.
- (A) 18 inches
 - (B) 2 feet
 - (C) 3 feet
 - (D) 4 feet
10. Rooms containing appliances requiring access shall be provided with a door and an unobstructed passageway measuring not less than _____ wide and 80 inches high.
- (A) 22 inches
 - (B) 24 inches
 - (C) 30 inches
 - (D) 36 inches

FLORIDA MECHANICAL CODE 2017: ANSWERS

ANSWER

- A A
- 2. C
- 3. A
- 4. C
- 5. C
- 6. D
- 7. D
- 8. C
- 9. C
- 10. D

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SECTION 4:

ISOMETRICS

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MATH BOOK: QUESTIONS

1. According to **Mathematics for Plumbers and Pipefitters**, a waste oil tank that is 3'3" in diameter and is 6'4" long, will hold _____gallons of waste oil. Select the closest answer.
 - A. 394
 - B. 360
 - C. 340
 - D. 391
2. According to **Mathematics of Plumbers and Pipefitters**, a lead roof boot with a 5" hole that is 18" high and has a flat plate area of 18" x 18" requires _____square feet of lead to make.
 - A. 3.2
 - B. 4.1
 - C. 8.2
 - D. 9.1
3. According to **Mathematics of Plumbers and Pipefitters**, a 20' round by 20' tall water tower with a 10' deep semispherical on the bottom, has _____gallons of water.
 - A. 62,805
 - B. 75,645
 - C. 80,745
 - D. 83,745
4. According to **Mathematics of Plumbers and Pipefitters**, on a standard weight 2 ½" pipe has _____ threads per inch.
 - A. 8
 - B. 16
 - C. 22
 - D. 24
5. According to **Mathematics for Plumbers and Pipefitters**, a run of pipe that is 60' long with a grade of ¼" fall per foot will drop _____far.
 - A. 7.5
 - B. 10
 - C. 12
 - D. 15

MATH BOOK: ANSWERS

- | | | |
|------|----------|----------|
| 1. A | Unit #49 | Page 177 |
| | Unit #47 | Page 173 |
| 2. B | Unit #45 | Page 168 |
| 3. A | Unit #50 | Page 180 |
| 4. A | Data #2 | Page 229 |
| 5. D | Unit #32 | Page 123 |

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ROOF DRAIN SIZING: QUESTIONS

1. According to **The Florida Plumbing Code**, what is the total square footage used to calculate the piping from area one? _____.
 - A. 3400
 - B. 3240
 - C. 2580
 - D. 2500
2. What is the total square footage used to calculate the piping from area two? _____.
 - A. 620
 - B. 70
 - C. 820
 - D. 90
3. What is the size of pipe "A"? _____.
 - A. 2"
 - B. 4"
 - C. 5"
 - D. 6"
4. What is the size of pipe "B" @ 1/8" fall per foot? _____.
 - A. 2"
 - B. 3"
 - C. 4"
 - D. 5"
5. What is the total square footage used to calculate the size of pipe "C"? _____.
 - A. 2580
 - B. 3240
 - C. 3400
 - D. 4300
6. What is the size of pipe "D"? _____.
 - A. 1-1/2"
 - B. 2"
 - C. 3"
 - D. 4"
7. What is the size of pipe "E" @ 1/2" fall per foot? _____.
 - A. 2"
 - B. 3"
 - C. 4"
 - D. 5"

8. What is the size of the pipe "C" $\frac{1}{2}$ " fall per foot? _____.
- A. 2"
 - B. 3"
 - C. 4"
 - D. 5"
9. What is the size of pipe "F" if the center wall is removed, and there is only one roof drain for the entire roof area? _____.
- A. 2"
 - B. 3"
 - C. 4"
 - D. 5"
10. What is the size of pipe "G" @ $\frac{1}{4}$ " fall per foot if the center wall is removed, and there is only one roof drain for the entire roof? _____.
- A. 3"
 - B. 4"
 - C. 5"
 - D. 6"

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ROOF DRAIN SIZING: ANSWERS

1. C

2. C

3. B

4. D

5. C

6. C

7. B

8. D

9. C

10. C

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CONCLUSION

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Good luck on Exam day!

Following your exam, please ...

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-AND-

Let us know how **WE** did

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