

The following test is Continuing Education for:

**Master Plumbers, Journeyman Plumbers, UDC Plumbing Inspectors,
and Commercial Plumbing Inspectors.**

You can complete the test by printing a hard copy, or you can take it online. All answers are found in the Wisconsin Uniform Plumbing Code Book (Comm. 81 and 82). If you do not own a Plumbing codebook, you may follow this link to the State of Wisconsin website and download it to your computer. <http://commerce.wi.gov/SB/SBDivCodesListing.tml>.

The answer sheet can be found at the end of the test. Take the following steps to complete the testing process:

- 1. Print the answer sheet and circle the correct answer.**
- 2. Complete and Mail the:**
 - a) Answer sheet**
 - b) Educational Course Attendance Verification Form
(found after the answer sheet)**
 - c) Correct fees.**

There is no reason to mail the whole test.

Remember: All questions have been extracted from the codebook. Therefore, the one correct answer will be as worded in the codes.

Begin test on the following page...

Plumbing Continuing Education Test 16

Comm 81.01: Definitions

1. _____ means an individual or agency recognized by the department to act on the department's behalf relative to a specific activity or function.
 - a. Manager
 - b. Agent
 - c. Inspector
 - d. Representative

2. _____ means a pressure vessel fixture designed to use steam under pressure for sterilizing.
 - a. Sterilizer, pressure
 - b. Autoclave
 - c. Sterilizer, pressure instrument washer
 - d. Both a and b

3. _____ means a health care facility that accepts federal funding in accordance with 42 CFR 416 of the federal register for health care finance and where 4 or more individuals that undergo a surgical procedure for which federal reimbursement is based.
 - a. Medical center
 - b. Outpatient surgery center
 - c. Non-ambulatory surgery center
 - d. Ambulatory surgery center

4. _____ means a unit for the treatment of wastewater which utilizes molecular oxygen in the absence of free oxygen for biological respiration and decomposition.
 - a. Aerobic treatment component
 - b. Anaerobic treatment component
 - c. Standard treatment component
 - d. None of the above

5. _____ means a pipe, other than a pipe located inside a building, that carries any of the following: storm water, groundwater or clear water.
 - a. Storm sewer
 - b. Surface water system
 - c. Dry wells
 - d. Street gutters

6. _____ means a feature formed in the soil matrix by the processes of reduction, translocation and oxidation of iron and manganese compounds in seasonally saturated soil.

- a. Nodules
- b. Redoximorphic feature
- c. Masses
- d. Pore linings

7. _____ means a membrane or material installed beneath a fixture to prevent leakage from escaping to the floor, ceiling or walls.

- a. Safing
- b. Basaltic rock
- c. Mineral wool
- d. Curtain wall system

8. _____ means a fitting or device supplied with water or other fluid under positive pressure which passes through an integral orifice or constriction causing a vacuum.

- a. Venturi effect
- b. Injector
- c. Aspirator
- d. Vacuum pump

9. _____ means the unwanted reverse flow of liquids, solids or gases.

- a. Backflow
- b. Downstream pressure
- c. Upstream pressure
- d. Cross-connection

10. _____ means a type of cross connection control device which is composed of 2 independently acting check valves internally force-loaded to a normally closed position, tightly closing shut-off valves located at each end of the assembly and fitted with test cocks.

- a. Double check backflow prevention assembly
- b. Backflow preventer, double check valve type
- c. DCV
- d. All of the above

11. _____ means a type of a double check backflow prevention assembly which includes a parallel flow meter to indicate leakage or unauthorized use of water downstream of the assembly.

- a. DC detector
- b. Double check detector assembly backflow preventer
- c. Double check detector valve type backflow preventer
- d. All of the above

12. _____ means a pressure greater than the supply pressure that may cause backflow.

- a. Backflow
- b. Ballcock
- c. Back siphonage
- d. Back pressure

13. _____ means a pressure greater than atmospheric and exerted for a period of more than 12 continuous hours.

- a. Absolute pressure
- b. Fixed pressure
- c. Continuous pressure
- d. High pressure

14. _____ means a receptacle designed to intercept and retain sand, grit, earth and other similar solids.

- a. Grease interceptor
- b. Sand interceptor
- c. Oil interceptor
- d. Mud interceptor

15. _____ means a piping arrangement for a drain system where the wastes from a fixture, appliance, appurtenance or device discharge by means of indirect or local waste piping terminating in a receptor at a point below the flood level rim of the receptor and above the inlet of the trap serving the receptor.

- a. Air-gap
- b. Jake break
- c. Air-break
- d. Air-gap, water supply system

16. _____ means the creation of a backflow as a result of negative pressure.

- a. Back siphonage backflow vacuum breaker
- b. Back siphonage
- c. Backwater valve
- d. Back pressure

17. _____ means horizontal piping within or under a building, installed below the lowest fixture or the lowest floor level from which fixtures can drain by gravity to the building sewer.

- a. Building drain
- b. Building drain, sanitary
- c. Building drain, storm
- d. Building drain branch

18. _____ means a substance, activity or condition that is known to have the potential to cause acute or chronic illness or death if exposure to the substance, activity or condition is not abated.

- a. High risk behavior
- b. Communicable disease
- c. Dangerous activities
- d. Human health hazard

19. _____ means that part of the drain system not within or under a building which conveys its discharge to a public sewer, private interceptor main sewer, private onsite wastewater treatment system or other point of discharge or dispersal.

- a. Building sewer, sanitary
- b. Building sewer
- c. Building sewer, storm
- d. Building subdrain

20. _____ means a type of cross connection control device which contains a check valve force-loaded closed and an air inlet vent valve force-loaded open to atmosphere, positioned downstream of the check valve, and located between and including 2 tightly closing shut-off valves and 2 test cocks.

- a. Back siphonage backflow vacuum breaker
- b. Back siphonage
- c. Backwater valve
- d. Back pressure

21. _____ means a water closet, lavatory and a bathtub or shower located together on the same floor level.

- a. Full bathroom
- b. Bathroom group
- c. Three-quarter bath
- d. None of the above

22. _____ means that portion of a drain system that consists of a series of pipes that transport water from one area to another without providing detention.

- a. Corporation cock
- b. Cross connection control assembly
- c. Conveyance system
- d. Cross connection

23. _____ means a pipe or channel outside a building which conveys storm water from the roof or gutter drains to a storm drain, storm sewer or to grade.

- a. Leader
- b. Adequate channel
- c. Control measure
- d. Major outfall

24. _____ means a color classification that specifies the relative degrees of the color variables in terms of hue, value and chroma.

- a. Mottling
- b. Ground surface color
- c. Redoximorphic feature
- d. Munsell soil color

25. _____ means the portion of a pipe that is enlarged to receive the end of another pipe of the same diameter for the purpose of making a joint.

- a. Bell
- b. Drip pan elbow
- c. Suction diffuser
- d. Connector

26. _____ means a type of plumbing system from which valid and reliable data are being sought to demonstrate compliance with the intent of chs. Comm 82 to 84.

- a. Failing private onsite wastewater treatment system
- b. Private sewage system
- c. Experimental system
- d. None of the above

27. _____ means a type of sewage pump which macerates wastewater consisting in part of sewage.

- a. Sewage pump
- b. Sewage grinder pump
- c. Effluent pump
- d. Sump pump

28. _____ means any industrial or commercial organization or enterprise operated for profit, including but not limited to a proprietorship, partnership, firm, business trust, joint venture, syndicate, corporation or association.

- a. Business services
- b. Organizational structure
- c. Business establishment
- d. Institutional structure

29. _____ means a type of stationary holding tank used to collect and hold wastewater discharges generated by an individual camping trailer or recreational vehicle.

- a. Campsite receptor
- b. Catch basin
- c. Camping unit transfer container
- d. None of the above

30. _____ means the accumulated floating solids generated during the biological, physical or chemical treatment, coagulation or sedimentation of wastewater.
- a. Sludge
 - b. Slime
 - c. Scum
 - d. Sewage
31. Sewage means wastewater containing fecal coliform bacteria exceeding 200 CFU, colony forming units, per 100 ml.
- a. True
 - b. False
32. _____ means a drain pipe serving as a receptor for the discharge wastes from indirect or local waste piping.
- a. Stack
 - b. Spring line pipe
 - c. Spigot
 - d. Standpipe
33. _____ means the unobstructed vertical distance through the free atmosphere between the outlet of indirect or local waste piping and the flood level rim of the receptor into which it discharges.
- a. Air-gap
 - b. Air-break
 - c. Air-gap, drain system
 - d. Air-gap, water supply system
34. _____ means an excavation which receives domestic wastewater by means of a drain system without pretreatment of the wastewater and retains the organic matter and solids permitting the liquids to seep from the excavation.
- a. Cesspool
 - b. Cistern
 - c. Refuse
 - d. Holding tank
35. _____ means a method of venting 2 to 8 traps or trapped fixtures without providing an individual vent for each trap or fixture.
- a. Circuit vent
 - b. Auto vent
 - c. Individual vent
 - d. Stack vent

36. _____ means a device supplied with hot or cold water, or both, and located adjacent to a water closet or clinical sink to be used for cleansing bedpans.

- a. Exposed wall hung unit
- b. Mixing valve
- c. Vacuum breaker
- d. Bedpan washer hose

37. Bedrock means rock that is exposed at the earth's surface or underlies soil material and includes:

- a. Weathered in-place consolidated material, larger than 2 mm in size and greater than 50% by volume
- b. Weakly consolidated sandstone at the point of increased resistance to penetration of a knife blade.
- c. Both a and b
- d. Neither a or b

38. _____ means an accessible opening in a drain system used for the removal of obstructions.

- a. Cleanout plug
- b. Plumbing auger
- c. Drain pipe
- d. Cleanout

39. _____ means solids in wastewater that can be removed readily by standard filtering procedures in a laboratory and reported as milligrams per liter (mg/L).

- a. Water quality measurement
- b. Conventional pollutant
- c. Total dissolved solids
- d. Total suspended solids

40. _____ means a fitting, device or arrangement of piping so designed and constructed as to provide, when properly vented, a liquid seal which prevents emission of sewer gases without materially affecting the flow of wastewater through it.

- a. Trap seal
- b. Trap seal primer
- c. Trap weir
- d. Trap

41. _____ means wastewater other than storm water, having no impurities or where impurities are below a minimum concentration considered harmful by the department, including but not limited to noncontact cooling water and condensate drainage from refrigeration compressors and air conditioning equipment, drainage of water used for equipment chilling purposes and cooled condensate from steam heating systems or other equipment.

- a. Blackwater
- b. Graywater
- c. Drainage water
- d. Clear water

42. _____ means a fixture combining one sink and laundry tray or a 2- or 3-compartment sink or laundry tray in one unit.

- a. Combination fixture
- b. Combination drain and vent system
- c. Combination private water main
- d. Combination water service

43. Lead-free means a chemical composition equal to or less than 0.3% of lead.

- a. True
- b. False

44. _____ means a portion of drain piping which receives the wastes discharged from indirect waste piping and which discharges those wastes by means of an air break or air gap into a receptor.

- a. Local waste piping
- b. Local vent
- c. Multipurpose piping system
- d. None of the above

45. _____ means a branch vent connecting at or downstream from the junction of 2 fixture drains and serving as a vent for those fixture drains.

- a. Common vent
- b. Circuit vent
- c. Auto vent
- d. Stack vent

46. _____ means a test performed on a plumbing system or portion thereof in which the system is filled with a liquid, normally water, and raised to a designated pressure.

- a. Hydrostatic test
- b. Test pressure
- c. Water jacket test
- d. Water pressure test

47. _____ means drain piping which does not connect directly with the drain system, but which discharges into the drain system by means of an air break or air gap into a receptor.

- a. Individual vent
- b. Indirect waste piping
- c. Infiltration component
- d. Infiltrative surface

48. _____ means a drain pipe inside the building which conveys storm water from a roof to the storm drain or storm sewer.

- a. Containment
- b. Conductor
- c. Contaminant load
- d. Common vent

49. _____ means a tank or pit that receives wastewater that must be emptied by mechanical means.

- a. Basement waterproofing system
- b. Sump
- c. Water table
- d. Water tank

50. _____ means a valve placed in a water service or a private water main, usually near the lot line.

- a. Dead end
- b. Stop and drain ball valve
- c. Meter valve
- d. Curb stop

51. _____ means a dimensional volume of in situ soil that receives wastewater for treatment or distributes final effluent for dispersal.

- a. Distribution cell
- b. Dispersal zone
- c. Documented data
- d. Domestic wastewater

52. _____ means a layer of soil material approximately parallel to the land surface and differing from adjacent genetically related layers in physical, chemical, or biologic characteristics.

- a. Soil consistence
- b. Soil morphology
- c. Soil horizon
- d. Soil profile

53. _____ means the end of a pipe which fits into a bell or hub.

- a. Valve
- b. Mixer tap
- c. Faucet
- d. Spigot

54. _____ means any pipe that carries wastewater or water-borne wastes.

- a. Drain system
- b. Exam sink
- c. Treatment sink
- d. Drain

55. _____ means liquid discharged from a process, device, appurtenance or piping system.

- a. Ejector
- b. Effluent
- c. Elevation
- d. Engineered soil

56. _____ means a specification, standard, guideline or procedure in the field of plumbing or related thereto, generally recognized and accepted as authoritative documented through national standards or specifications.

- a. Approved standards
- b. Quality assurance standards
- c. Accepted engineering practice
- d. None of the above

57. _____ (when applied to a fixture, appliance, pipe, fitting, valve or equipment) means having access for maintenance, but which first may require the removal of an access panel or similar obstruction.

- a. Accessible
- b. Readily accessible
- c. Open
- d. Available

58. _____ means wastewater contaminated by waste materials, exclusive of urine, feces or industrial waste, deposited into plumbing drain systems.

- a. Groundwater
- b. Graywater
- c. Clearwater
- d. Blackwater

59. _____ means a unit for the treatment of wastewater that utilizes the principle of oxidation for biological decomposition.

- a. Standard treatment component
- b. Anaerobic treatment component
- c. Residential wastewater system
- d. Aerobic treatment component

60. _____ means a receptacle designed to intercept and retain or remove grease or fatty substances.

- a. Grease recovery device
- b. Grease interceptor
- c. Grease shield
- d. Grease guzzler

61. _____ means a plumbing appliance, the function of which is unique to health care activities.

- a. Hand held shower
- b. Assisted living bath fixtures
- c. Health care plumbing appliance
- d. Healthcare accessible

62. _____ means a device designed to prevent the reverse flow of wastewater in a drain system.

- a. Access box
- b. Diverter valve
- c. Backwater valve
- d. Access sleeve

63. _____ means a water supply valve opened or closed by means of a float or similar device used to supply water to a tank.

- a. Ballcock
- b. Float
- c. Lever
- d. Liftarm

64. _____ means zones of soil saturation which include perched water tables, shallow regional groundwater tables or aquifers, or zones that are seasonally, periodically or permanently saturated.

- a. High hazard
- b. High groundwater elevation
- c. Low groundwater
- d. High groundwater

65. _____ means a manufactured device or prefabricated assembly of component parts which is an adjunct to a plumbing product or plumbing system.
- a. Accessory
 - b. Appurtenance
 - c. Fabricated
 - d. Assembled
66. _____ means a receptor designed to collect storm waters from an open area.
- a. Floor drain
 - b. Area drain
 - c. Trench drain
 - d. Grease interceptor
67. _____ means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank or plumbing fixture and the flood level rim or spill level of the receptacle.
- a. Air-gap, water supply system
 - b. Air-gap
 - c. Air-gap, drain system
 - d. Air-break
68. _____ means a watertight receptacle for the collection and holding of wastewater.
- a. Holding tank
 - b. Horizontal pipe
 - c. Hose connection backflow preventer
 - d. Hose connection vacuum breaker
69. Hot water means water at a temperature of 110 °F or more.
- a. True
 - b. False
70. _____ means soil naturally formed or deposited in its present location or position and includes soil material that has been plowed using normal tillage implements and depositional material resulting from erosion or flooding.
- a. In situ soil
 - b. Ex situ soil
 - c. Soil mechanics
 - d. Shrink-swell capacity

71. _____ means a part of a piping system other than a riser, main or stack.

- a. Fitting
- b. Valve
- c. Pipe cap
- d. Branch

72. _____ means the vertical distance along a drain stack measured from immediately below a branch drain connection to immediately below the first lower branch drain connection that is 8 feet or more below.

- a. Branch tailpiece
- b. Branch vent
- c. B. T. U
- d. Branch interval

73. _____ means a device designed and installed so as to separate and retain deleterious, hazardous or undesirable matter from wastes flowing through it.

- a. Interceptor
- b. Separator
- c. Neither a or b
- d. Both a and b

74. _____ means a combination relief valve designed to function as both a temperature relief and pressure relief valve.

- a. Temperature and pressure relief valve
- b. Low pressure valve
- c. Vacuum valve
- d. Temperature relief valve

75. _____ water means water ranging in temperature from 85 °F. to less than 110 °F.

- a. Hot
- b. Alkaline
- c. Tempered
- d. Tap

76. _____ means a product designed to support soil and create a cavity for the temporary storage of effluent and to provide an infiltrative surface for the distribution cell POWTS dispersal or treatment component.

- a. Septic tank
- b. Leaching chamber
- c. Drainfield
- d. Gravelless system

77. _____ means a device designed to intercept and retain oil, lubricating grease or other similar materials.
- a. Grease recovery device
 - b. Grease trap
 - c. Oil interceptor
 - d. Grease guzzler
78. Design wastewater flow means 100% of the estimated wastewater flow generated by a dwelling, building or facility.
- a. True
 - b. False
79. _____ means a type of POWTS treatment component, excluding a soil-based POWTS treatment component, that utilizes a chemical or photoelectric process to reduce the wastewater fecal coliform contaminant load.
- a. Ozonation
 - b. Chlorination
 - c. Disinfection unit
 - d. Artificial UV radiation
80. _____ means the point on the bank or shore up to which the presence and action of surface water is so continuous as to leave a distinctive mark such as by erosion, destruction or prevention of terrestrial vegetation, predominance of aquatic vegetation, or other easily recognized characteristic.
- a. Ordinary high-water mark
 - b. Hydrophytic
 - c. Public trust domain
 - d. Floodplain
81. _____ means a fixture having an integral trap and a flushing rim so that water cleanses the interior surface.
- a. Flushing rim sink
 - b. Clinic service sink
 - c. Clinic sink
 - d. All of the above
82. _____ means a valve end of a water pipe by means of which water can be drawn from or held within the pipe.
- a. Faucet
 - b. Fixture drain
 - c. Fixture supply
 - d. Final effluent

83. _____ means a receptor for the discharge from indirect or local waste piping installed with its flood level rim even with the surrounding floor.

- a. Foundation drain
- b. Flushometer valve
- c. Flush valve
- d. Floor sink

84. Cold water means water at a temperature less than 87 °F.

- a. True
- b. False

85. Plumbing means and includes:

- a. All piping, fixtures, appliances, equipment, devices and appurtenances in connection with the water supply, water distribution and drainage systems, including hot water storage tanks, water softeners and water heaters connected with such water and drainage systems and also includes the installation thereof.
- b. The construction, connection or installation of any drain or waste piping system from the outside or proposed outside foundation walls of any building to the mains or other sewage system terminal within bounds of, or beneath an area subject to easement for highway purposes, including private sewage systems, and the alteration of any such systems, drains or waste piping.
- c. The water service piping from the outside or proposed outside foundation walls of any building to the main or other water utility service terminal within bounds of, or beneath an area subject to easement for highway purposes and its connections.
- d. All of the above

86. _____ includes the water supply system, the drain system, the vent system, plumbing fixtures, plumbing appliances and plumbing appurtenances that serve a building, structure or premises.

- a. Plumbing appliance
- b. Plumbing fixture
- c. Plumbing system
- d. POWTS

87. _____ means a pressure actuated valve held closed by a spring or other means and designed to automatically relieve pressure at a designated pressure.

- a. Quick closing valve
- b. Pressure relief valve
- c. Anti-siphon valve
- d. Control valve

88. _____ means a type of cross connection control device which consists of an independently operating internally loaded check valve and an independently operating loaded air inlet located on the discharge side of the check valve, a tightly closing shut-off valve located at each end of the assembly, and test cocks.

- a. Pressure vacuum breaker assembly
- b. PVB
- c. Both a and b
- d. Neither a or b

89. _____ means a device that uses the water supply to create a pressurized discharge to flush a fixture exclusive of gravity type flushing systems.

- a. Flushometer valve
- b. Pressurized flushing device
- c. Flushometer tank
- d. Gravity type flushing system

90. _____ means a roughness or metal protruding from the walls of a pipe usually as the result of cutting the pipe.

- a. Nipple
- b. Burr
- c. Bump
- d. Bulge

91. _____ means wastewater contaminated by human body waste, toilet paper and any other material intended to be deposited in a receptor designed to receive urine or feces.

- a. Clearwater
- b. Graywater
- c. Blackwater
- d. None of the above

92. Potable water means water that is:

- a. Safe for drinking, personal or culinary use.
- b. Free from impurities present in amounts sufficient to cause disease or harmful physiological effects.
- c. Both a and b
- d. Neither a or b

93. _____ means any subsystem, subassembly or other system designed for use in or as part of a private onsite wastewater treatment system which may include treatment, dispersal or holding and related piping.

- a. POWTS treatment component
- b. POWTS holding component
- c. POWTS dispersal component
- d. POWTS component

94. _____ means a vessel designed to receive the discharge from a boiler blow-off outlet and to cool the discharge to a temperature that permits safe entry into the drain system.

- a. Boiler feed system
- b. Boiler blow-off basin
- c. Deaerators
- d. Boiler blow-down system

95. Private water main means a water main serving 2 or more buildings and is part of the municipal water system.

- a. True
- b. False

96. _____ means a valve or faucet that closes automatically when released manually or controlled by mechanical means for fast action closing.

- a. Globe valve
- b. Pressure relief valve
- c. Quick closing valve
- d. Angle valve

97. _____ means a connection in which one pipe slips into another, the joint of which is made tight with a compression type fitting.

- a. Slip-joint
- b. Cam
- c. Set screw
- d. Leveling rods

98. _____ means the accumulated solids generated during the biological, physical or chemical treatment, coagulation or sedimentation of water or wastewater.

- a. Slime
- b. Sludge
- c. Scum
- d. Sewage

99. _____ means an automatic device located in a sump, pit or low point that is designed to elevate storm water, groundwater or clear water.

- a. Pedestal
- b. Submersible
- c. Sump pump
- d. Canister

100. _____ means the reference point on a vacuum breaker that must be submerged before backflow can occur.

- a. Cross connection
- b. Critical level
- c. Cross connection control device
- d. None of the above

Comm 82.01: Scope.

101. The provisions of this chapter apply _____ to the design, construction, installation, supervision, maintenance and inspection of plumbing, including but not limited to sanitary and storm drainage, water supplies, wastewater treatment, and dispersal or discharge for buildings, except for POWTS systems as regulated by ch. Comm 83.

- a. Specifically
- b. Exclusively
- c. Entirely
- d. Uniformly

Comm 82.015: Purpose.

102. Pursuant to s. 145.02, Stats., the purpose of this chapter is to provide that all plumbing in connection with buildings and facilities in the state, including buildings owned by the state or any political subdivision thereof, shall be safe, sanitary and such as to safeguard the public health and the _____ .

- a. Community
- b. Waters of the state
- c. Environment
- d. Infrastructure

103. Pursuant to s. 145.13, Stats., this chapter is uniform in application and a municipality may not enact an ordinance for the design, construction, installation, supervision, maintenance and inspection of plumbing which is more _____ than this chapter, except as specifically permitted by rule.

- a. Lenient
- b. Stringent
- c. Rigorous
- d. Thorough

Comm 82.10: Basic plumbing principles.

104. This chapter is founded upon basic principles of environmental _____ and safety through properly designed, installed and maintained plumbing systems.

- a. Sanitation
- b. Health
- c. Practices
- d. Standards

105. Some of the _____ of plumbing construction may vary, but the basic sanitary and safety principles desirable and necessary to protect the health of people are the same.

- a. Information
- b. Practices
- c. Details
- d. Standards

106. Plumbing in connection with all buildings, public and private, intended for human occupancy, shall be installed and maintained in such a manner so as to protect the _____ of the public or occupants and the waters of the state.

- a. Health
- b. Safety
- c. Welfare
- d. All of the above

107. Plumbing fixtures, appliances and appurtenances, whether existing or to be installed, shall be supplied with water in _____ volume and at pressures adequate to enable the fixtures, appliances and appurtenances to function properly and efficiently at all times and without undue noise under normal conditions of use.

- a. Sufficient
- b. Adequate
- c. Appropriate
- d. Satisfactory

108. Plumbing systems shall be designed and adjusted to use the _____ quantity of water consistent with proper performance and cleaning.

- a. Maximum
- b. Minimum
- c. Sufficient
- d. Approved

109. Devices for heating and storing water in pressure vessels or tanks shall be so designed and installed as to _____ dangers of explosion or overheating.

- a. Avoid
- b. Circumvent
- c. Avert
- d. Prevent

110. Drain systems shall be designed, constructed and maintained so as to conduct the wastewater or sewage _____ and shall have adequate cleanouts.

- a. Efficiently
- b. Effectively
- c. Appropriately
- d. Sufficiently

111. The drain systems shall be so designed as to provide an adequate circulation of air in all pipes and no _____ of siphonage, aspiration or forcing of trap seals under conditions of ordinary use.

- a. Danger
- b. Chance
- c. Threat
- d. Risk

112. A plumbing system shall be of durable material, free from defective workmanship, and designed and constructed so as to provide _____ service for its reasonable expected life.

- a. Acceptable
- b. Satisfactory
- c. Reasonable
- d. Adequate

113. Proper _____ shall be provided to prevent contamination of food, water, sterile goods and similar materials by backflow of wastewater.

- a. Prevention
- b. Means
- c. Measures
- d. Protection

114. All plumbing fixtures shall be installed so as to provide adequate spacing and accessibility for the intended use and _____.

- a. Cleaning
- b. Safety
- c. Function
- d. Capabilities

115. Every building intended for _____ shall be provided with an adequate, safe and potable water supply.

- a. Shelter
- b. Human occupancy
- c. Habitat
- d. None of the above

116. To fulfill the basic needs of sanitation and personal hygiene, each dwelling connected to a POWTS or public sewer shall be provided with at least the following plumbing fixtures:

- a. one water closet
- b. one wash basin and one kitchen sink
- c. one bathtub
- d. All of the above

117. Hot or tempered water shall be supplied to all plumbing fixtures that ____ require hot or tempered water for proper use and function.

- a. Usually
- b. Normally
- c. Generally
- d. Commonly

118. Where plumbing fixtures exist in a building that is connected to a public sewer system, suitable provision shall be made for treating, recycling, dispersing or holding the wastewater.

- a. True
- b. False

119. Plumbing fixtures shall be made of _____, smooth, non-absorbent and corrosion resistant material, and shall be free from concealed fouling surfaces.

- a. Impervious
- b. Approved
- c. Durable
- d. Seamless

Comm 82.20: Plan review and cross connection

120. When review is required, regardless of where the installation is to be located, written approval for the plans shall be obtained _____ installation of the work.

- a. Immediately after
- b. At the time of
- c. Prior to
- d. After

121. AGENT MUNICIPALITIES. The department may _____ to an approved municipality the authority to review and approve plumbing plans and specifications for those plumbing installations to be located within the municipality's boundary limits and which require approval under sub. (1) (b).

- a. Assign
- b. Delegate
- c. Entrust
- d. Designate

122. An agent municipality shall employ at least 2 _____ plumbing inspectors who have been qualified by the department.

- a. Full time
- b. Part-time
- c. Licensed
- d. Certified

123. The primary duties of the plumbing inspectors shall include plumbing _____.

- a. System review
- b. Distribution system review
- c. Plan review
- d. Disposal review

124. The plumbing inspectors shall be _____ licensed master or journeyman plumbers.

- a. Regionally
- b. Nationally
- c. State
- d. Wisconsin

125. An agent municipality may _____ its jurisdiction for plan review and approval for any project, in which case plans shall be submitted to the department for review and approval.

- a. Waive
- b. Enforce
- c. Surrender
- d. Implement

126. Agent municipalities may set by ordinance the fees for plan review services.

- a. True
- b. False

127. PRIORITY PLAN REVIEW. An appointment may be made with the department to facilitate the examination of plans in less than the normal processing time.

- a. True
- b. False

128. PLANS AND SPECIFICATIONS. At least _____ set (s) of plans and one copy of specifications which are clear, legible and permanent copies shall be submitted for examination and approval.

- a. 3
- b. 1
- c. 2
- d. 4

129. All plans submitted for approval shall be accompanied by sufficient data and information for the department to _____ if the installation and its performance will meet the requirements of chs. Comm 81 to 84.

- a. Determine
- b. Conclude
- c. Evaluate
- d. Assess

130. Information to accompany the plans shall include:

- a. The location or address of the installation
- b. The name of the owner
- c. The name of the contractor
- d. a and b

131. Plans proposing the installation, creation or extension of a private sanitary building sewer or a sanitary private interceptor main sewer which is to discharge to a municipal treatment facility shall not be approved, if the municipality is ineligible for sanitary sewer extension approvals under s. NR 110.05.

- a. True
- b. False

132. Plans proposing the installation of a building sewer for new construction which is to discharge to a municipal treatment facility shall not be required to comply with subd. 3., if:

- a. The proposed installation is served by an existing building sewer which extends from the lot line to the public sewer and the proposed installation does not exceed the capacity of the existing building sewer or sewers.
- b. The plans indicate that a drainage load of not more than 54 drainage fixture units will be discharged through the building sewer.
- c. a OR b
- d. a and b

133. When requesting approval of an experimental plumbing system, which of the following shall be submitted:

- a. At least 2 sets of plans signed in accordance with par. (d) and detailing the system installation for each site.
- b. A letter of consent from the site or system owner of the installation. The letter shall acknowledge that the owner has received and read a copy of the experimental plumbing system submittal and is in agreement with all requirements listed within this subdivision.
- c. Any additional information as requested by the department.
- d. All of the above

134. No later than five years after the date of the completed installation the department may perform one of the following:

- a. Order the removal of the experimental plumbing system.
- b. Issue an alternate approval as specified in sub. (12) (a).
- c. Provide an extension of the experiment with conditions.
- d. All of the above

135. The department may revoke any approval, issued under the provisions of this chapter, for any false statements or misrepresentation of facts on which the approval was based.

- a. True
- b. False

136. Plan approval by the department or its authorized representative shall expire _____ year(s) after the date indicated on the approval letter, if construction has not commenced within that _____ year period.

- a. one half
- b. one
- c. two
- d. three

137. Except for priority petitions, the department shall review and make a determination on a petition for variance within _____ business days of receipt of all calculations, documents and fees required to complete the review.

- a. 30
- b. 7
- c. 10
- d. 14

Comm 82.21 Testing and maintenance

138. Except as provided in par. (a), all new plumbing and all parts of existing systems which have been altered, extended or repaired shall be _____ as specified in par. (d) to disclose leaks and defects before the plumbing is put into operation.

- a. Tested
- b. Reviewed
- c. Evaluated
- d. Appraised

139. The testing of the plumbing shall not be required where the installation does not include the addition, replacement, alteration or relocation of any water distribution, drain or vent piping.

- a. True
- b. False

140. Where the plumbing is installed in a municipality having a _____, the testing of the plumbing shall be done in the presence of a plumbing inspector, except as provided in subd. 1.

- a. Home inspector
- b. Construction inspector
- c. Local inspector
- d. Public works inspector

141. The plumber shall have present the proper _____ for making the tests, and shall furnish such assistance as may be necessary in making the inspection.

- a. Apparatus
- b. Appliances
- c. Tools
- d. a and b

142. A _____ inspection shall be made when the plumbing system is roughed-in and before fixtures are set.

- a. Rough-in
- b. First rough
- c. Second rough
- d. Final

143. Except as provided in subd. 1., plumbing work shall not be closed in, concealed, or covered until it has been _____ by the plumbing inspector and permission is granted to do so.

- a. Inspected
- b. Approved
- c. Evaluated
- d. a and b

144. Upon completion of the plumbing installation and before _____ approval is given, the plumbing inspector shall inspect the work.

- a. Final
- b. Initial
- c. Early
- d. Pre-

145. Whenever the plumbing official finds that the work or installation does not pass any initial test or inspection, the _____ corrections shall be made to comply with this chapter.

- a. Necessary
- b. Full
- c. Completed
- d. Identified

146. The work or installation shall then be _____ for inspection to the plumbing inspector.

- a. Reviewed
- b. Resubmitted
- c. Evaluated
- d. Reconsidered

147. The building sewer or private interceptor main sewer shall be tested by insertion of a test plug at the point of connection with the _____ sewer.

- a. Public
- b. Sanitary
- c. Stormwater
- d. Dedicated

148. The air test shall be made by attaching an air compressor testing apparatus to any _____ opening, and, after closing all other inlets and outlets to the system, forcing air into the system until there is a uniform gauge pressure of 3 pounds per square inch.

- a. Appropriate
- b. Approved
- c. Suitable
- d. Correct

149. The entire building drain with all its branches, receptacles and connections shall be brought so far as practical to the surface or grade of the basement floor and shall be tested with _____ in accordance with subd. 7.

- a. Water
- b. Air
- c. Water or air
- d. None of the above

150. The piping of a water distribution system shall be tested and proved water tight under a water pressure _____ the working pressure under which it is to be used.

- a. Equal to
- b. Matching
- c. Not more than
- d. Not less than

151. A test for _____ shall be applied to the entire drain and vent system at one time or to the entire system in sections after the rough piping has been installed in accordance with either subd. 7. a. or b.

- a. Waterflow
- b. Static pressure
- c. Residual pressure
- d. Watertightness

152. If applied to the entire system, all openings in the piping shall be tightly closed, except the _____ opening, and the system shall be filled with water to the point of overflow.

- a. Highest
- b. Lowest
- c. Main
- d. Top

153. If the system is tested in sections, each opening shall be tightly plugged _____ the highest opening of the section under test, and each section shall be filled with water, but a section shall not be tested with less than a 10 foot head of water.

- a. Including
- b. Excluding
- c. Except
- d. Counting

154. In testing successive sections, at least the upper _____ feet of the next preceding section shall be tested, so that no joint or pipe in the building, except the uppermost _____ feet of the system, is subjected to a test of less than a _____ foot head of water.

- a. 5
- b. 10
- c. 12
- d. 15

155. Where _____ by the local plumbing inspector, after the plumbing fixtures have been installed and the traps filled with water, the connections shall be tested and proved gas and watertight by either one of the methods specified in subd. 8. a. or b.

- a. Required
- b. Recommended
- c. Assessed
- d. Suggested

156. The smoke test shall be made by introducing a _____, thick smoke, produced by one or more smoke machines, into the completed system.

- a. Strong
- b. Substantial
- c. Pungent
- d. Putrid

157. When the smoke appears at stack openings on the roof, the openings shall be closed and a pressure equivalent to a (n) _____ inch water column shall be built and maintained for the period of the inspection.

- a. One
- b. Two
- c. Three
- d. Six

158. When a hazard to _____ exists or is created by an existing system, that system shall be repaired or replaced.

- a. Life
- b. Health
- c. Property
- d. All of the above

159. When an old or defective fixture is removed, to be replaced by a new fixture, and no other fixture or piping is to be added or remodeled, it is necessary to reconstruct the drain or vent piping to make it conform to the provisions of this chapter, unless the drain or vent piping is in a defective condition.

- a. True
- b. False

160. Where the existing drain or vent piping does not conform to the provisions of this chapter, the department may require the new fixtures to be provided with _____ traps.

- a. Full
- b. Drum
- c. Non-siphoning
- d. Deep Seal

161. When old or defective plumbing is to _____, the remodeled system shall be made to conform to this chapter.

- a. Be remodeled
- b. Have additional fixtures installed
- c. Have the whole plumbing system moved to another part of the building
- d. a, b, or c

162. Except as provided in subd. 2., plumbing materials removed and found to be in _____ condition, may be reused if such reuse is approved by the department or a local plumbing inspector.

- a. Excellent
- b. Good
- c. Fair
- d. Satisfactory

163. The owner of the building or facility in which the reused materials are to be installed shall provide _____ consent.

- a. Verbal
- b. Written
- c. Informed
- d. Legal

164. Water supply piping materials may only be _____ when intended for uses having an equal or higher degree of hazard than the previous use as specified in Table 82.70-1.

- a. Used
- b. Reused
- c. Salvaged
- d. Recycled

165. Existing building sewers and drains may be used in connection with _____ buildings only when they are found on examination and test to conform to the requirements of this chapter governing building sewers and drains.

- a. Commercial
- b. New
- c. Industrial
- d. Vacant

166. If the existing work is found _____ the local or state inspector shall notify the owner of the changes necessary to make it conform to the requirements of this chapter.

- a. Deficient
- b. Incomplete
- c. Defective
- d. To be substandard

167. All repairs to fixtures or piping shall be done in conformance with the provisions of this chapter, except repair clamps or bands may be used for _____ situations.

- a. Emergency
- b. Approved
- c. Unusual
- d. Atypical

168. When a structure is _____, all sanitary sewer, storm sewer and water supply connections shall be sealed and plugged in a safe manner.

- a. Demolished
- b. Removed
- c. a or b
- d. Preserved

169. If a dead end is created in the removal of any part of a drain system, all openings in the drain system shall be properly _____ .

- a. Sealed
- b. Installed
- c. Cleaned
- d. Fitted

170. A performance test shall be conducted for the devices listed in Table 82.21-1 at all of the following intervals EXCEPT:

- a. Before the time of installation.
- b. Immediately after repairs to the device have occurred
- c. Immediately after alterations to the device have occurred.
- d. At least annually.

171. As specified in Table 82.21-1, the results of the cross connection device performance test shall be submitted to the department and purveyor within _____ days of completion of the test.

- a. 14
- b. 20
- c. 60
- d. 30

172. The results of performance tests for the devices or assemblies listed in Table 82.21-1 shall be made available upon _____ to the department, its agent, or the local governmental unit.

- a. Submission
- b. Request
- c. Notification
- d. Application

173. The maintenance and performance testing requirements of this subsection shall also apply to those cross connection control devices or assemblies installed prior to the _____ date of this subsection.

- a. Effective
- b. Due
- c. Approved
- d. Reference

Comm 82.30: Sanitary drain systems

174. The provisions of this section set forth the requirements for the design and installation of sanitary drain systems, including building drains and _____ sewers.

- a. Building
- b. Storm
- c. Water
- d. Public

175. Drainage fixture unit values for intermittent flow fixtures not listed in Table 82.30-1 shall be computed on the basis of one fixture unit equaling _____ gallons per minute of flow.

- a. 6
- b. 7.5
- c. 6.5
- d. 7

176. Drainage fixture unit values for _____ flow devices such as pumps, ejectors, air conditioning equipment or similar devices shall be computed on the basis of one fixture unit for each 2 gallons per minute of flow rate of discharge into the drain system.

- a. Continuous
- b. Semicontinuous
- c. a or b
- d. None of the above

177. The drainage fixture unit values assigned to a receptor which is to receive only the indirect waste discharge from a relief valve on a domestic water heater may be disregarded when determining the _____ size of the building drain and building sewer.

- a. Suitable
- b. Correct
- c. Maximum
- d. Minimum

178. The minimum size of a gravity flow sanitary building sewer shall be _____ inches in diameter.

- a. 2
- b. 4
- c. 6
- d. 5

179. A municipality or sanitary district by ordinance may not require that portion of the building sewer between the lot line and the public sewer to be larger than 4 inches in diameter.

- a. True
- b. False

180. Sewers pressurized through the use of _____ shall be sized to maintain a minimum flow velocity of 2 feet per second and shall be in accordance with the ejector or pump manufacturer's recommendations.

- a. Sewage ejectors
- b. Sewage pumps
- c. Sewage grinder pumps
- d. All of the above

181. Except as provided in subd. 3., the minimum size of pressurized private interceptor main sewer shall be such so as to maintain a minimum flow velocity of _____ feet per second.

- a. 3
- b. 2
- c. 3.5
- d. 2.5

182. Where provisions are made for the future installation of fixtures, the _____ of such fixtures shall be considered in determining the required sizes of drain and vent pipes.

- a. Drainage fixture unit values
- b. Water supply fixture unit values
- c. Drainage fixture unit loads
- d. Expected loads

183. Construction to provide for _____ installations shall be terminated with a plugged fitting or fittings.

- a. Future
- b. Emergency
- c. Permanent
- d. Institutional

184. All changes in direction of flow in drain piping shall be made by the appropriate use of _____.

- a. 45 degree wyes
- b. Long or short sweep quarter bends
- c. Sixth, eighth, or sixteenth bends
- d. Combination of the above or other equivalent fittings

185. Where blowout type fixtures are installed _____, appropriate fittings shall be installed to prevent the passage of wastes from one fixture to the other.

- a. Remotely
- b. Closely
- c. Concurrently
- d. Back to back

186. Drain fittings, connections, devices and methods of installation shall not obstruct or retard the flow of _____ in the drain system or venting system in an amount greater than the normal frictional resistance to flow, unless as otherwise permitted in this chapter or unless approved by the department.

- a. Water and air
- b. Wastes and sewage
- c. a and b
- d. Gas

187. All sanitary building _____ shall discharge into an approved, vented sump with an airtight cover.

- a. Venting system
- b. Drainage system
- c. a and b
- d. Subdrains

188. The sump shall be so located as to receive the sewage by gravity flow, and shall be located at least _____ feet from any water well.

- a. 6
- b. 10
- c. 20
- d. 25

189. The water supply fixture unit method shall be used to determine peak input flow in gallons per minute; _____ the fixtures that drain to the sump shall be included.

- a. Only
- b. All
- c. None of
- d. Primarily

190. When converting water fixture units to gallons per minute it is _____ to calculate the load as a supply system with predominantly flush tanks.

- a. Not permissible
- b. Permissible
- c. Sufficient
- d. Useful

191. The capacity of the sump shall be such that the pump when actuated by the lowest "pump on" switch runs at least _____ seconds.

- a. 20
- b. 30
- c. 45
- d. 60

192. Between the highest “pump on” switch level and the sump inlet, the sump shall hold the amount of input that exceeds the discharge of the pumping equipment in a 5 minute peak input period, but in no case shall the vertical distance between the switch and the inlet be less than _____ inches.

- a. 3
- b. 2
- c. 4
- d. 2.5

193. The _____ level shall be maintained in accordance with the pump manufacturer’s requirements, but shall not be less than 4 inches above the sump bottom.

- a. High water
- b. Low water
- c. Permissible
- d. Approved

194. Penetrations through the top of removable sump covers shall be limited to those for the _____ for the pump or pumps.

- a. Electrical supply
- b. Vent piping
- c. Discharge piping
- d. All of the above

195. Where required. The liquid from all sanitary building sumps shall be lifted and discharged into the building sanitary drain system by _____.

- a. Automatic ejectors
- b. Pumps
- c. Other equally efficient method approved by the department.
- d. All of the above

196. Duplex ejector or pumping equipment shall be installed in a public building where discharge into a sump.

- a. 3 or more water closets
- b. More than 10 drainage fixture units
- c. More than 20 drainage fixture units
- d. a or c

197. Where duplex pumping equipment is installed, a(n) _____ alarm system with a manual control reset shall be installed to indicate pump failure.

- a. Audible
- b. Visual
- c. a and b
- d. a or b

198. The size and design of an ejector or pump shall be determined by the _____.

- a. Capacity of the sump to be served
- b. The discharge head
- c. Discharge frequency
- d. All of the above

199. The _____ pipe from the ejector or pump shall be connected to the gravity drain by means of a wye pattern fitting.

- a. Discharge
- b. Supply
- c. Main
- d. Primary

200. With the exception of _____sumps, a full flow check valve shall be installed in the discharge piping from each ejector or pump.

- a. Exterior
- b. Contained
- c. Uncontained
- d. Turbine

201. Where _____ejector or pumping equipment is installed, each discharge pipe from an ejector or pump shall be provided with a gate or ball type valve installed downstream of each full flow check valve.

- a. Special
- b. Duplicate
- c. Existing
- d. Pressurized

202. Air relief valves shall be _____at all high points in the discharge piping of an ejector or pump where the piping arrangement creates an air trap.

- a. Supported
- b. Supplied
- c. Maintained
- d. Provided

203. No fixtures may be connected to the discharge pipe between the ejector or pump and the point where it enters the gravity drain.

- a. True
- b. False

204. No building sewer may pass through or under a building to serve another building, unless:

- a. The building sewer serves farm buildings or farm houses, or both, which are all located on one property
- b. The building sewer or private interceptor main sewer serves buildings located on the same property and a document, which indicates the piping and distribution arrangement for the property and buildings, shall be recorded with the register of deeds no later than 90 days after installation.
- c. The building sewer serves farm buildings or farm houses, or both, which are all located on neighboring properties.
- d. a or b

205. All building drains shall be installed below the lowest floor levels on which fixtures may be installed if the _____ elevation permits.

- a. Public sewer
- b. POWTs
- c. Private interceptor main sewer
- d. a, b, or c

206. A building drain subject to backflow or backwater shall be _____ with a backwater valve or with a sump with pumping equipment in accordance with sub. (10).

- a. Protected
- b. Supported
- c. Supplied
- d. Connected

207. _____ valves, when fully open, shall have a capacity not less than that of the pipes in which installed.

- a. Ball
- b. Butterfly
- c. Backwater
- d. Non-return

208. Backwater valves shall be so located as to be readily accessible for _____ .

- a. Flushing
- b. Cleaning
- c. Appraisal
- d. Adjustment

209. Where a plumbing fixture or appliance is located on a floor which is entirely _____, a floor drain shall be installed to serve that floor.

- a. Above grade
- b. At grade
- c. Below grade
- d. None of the above

210. In any room containing the recessed or concealed portions of _____ located in health care or related facilities, at least one floor drain connecting to the drainage system shall be installed in a manner to adequately drain the entire floor area.

- a. Sterilizers
- b. Autoclaves
- c. X-ray equipment
- d. All of the above

211. Except as provided in subd. 2. c. to e., a building sewer or private interceptor main sewer shall be protected from _____ in accordance with subd. 3. in areas where the top of the building sewer or private interceptor main sewer is located less than 60 inches below a surface area from which snow will be cleared.

- a. Snow
- b. Hail
- c. Ice
- d. Frost

212. Where a building sewer or private interceptor main sewer is installed to serve summer use public facilities, frost protection requirements shall not apply.

- a. True
- b. False

213. All _____ for building drains and building sewers shall be open trench work, unless otherwise permitted by local ordinance or accepted by the local inspector.

- a. Trenching
- b. Shoring
- c. Excavations
- d. Backfilling

214. Where the bottom of the trench can be maintained in a stable condition and free of _____ during the time of installation the building drain and the building sewer shall be bedded and initially backfilled as specified in this subdivision.

- a. Water
- b. Hazardous atmospheres
- c. Surface tension cracks
- d. Saturated soil

215. Where the trench bottom does not contain stone larger than one inch in size or where bedrock is not _____, the trench may be excavated to grade.

- a. Encountered
- b. Present
- c. Unconsolidated
- d. Sloped

216. Where a mucky or unstable bottom is encountered in the trench, the required dry and stable foundation conditions shall be provided by sheathing driven and left in place to a depth of 48 inches below the trench bottom or to solid foundation at a lesser depth, the removal of wet and yielding material to a depth of 24 inches or to solid material, and replacement of the unstable material with _____ for the bedding under the pipe.

- a. Limestone screenings
- b. Pea gravel
- c. Equivalent material
- d. a, b, or c

217. Care shall be exercised in placing the _____ of the backfill to prevent breakage of the pipe.

- a. Open-graded soil
- b. Unsuitable material
- c. Remainder
- d. Balance

218. _____ shall not be used in the backfill.

- a. Large boulders or rock
- b. Concrete slabs
- c. Frozen masses
- d. All of the above

219. The ends of all pipes not immediately connected shall be closed so as to _____ the introduction of earth or drainage from an excavation.

- a. Thwart
- b. Prevent
- c. Stop
- d. Impede

220. Where a forced building sewer discharges to a pressurized public sewer, a _____ shall be installed.

- a. Full flow corporation cock
- b. Full flow curb stop
- c. Check valve and dresser type coupling
- d. All of the above

221. The curb stop, check valve and dresser type coupling shall be installed on the property _____ to the connection to the common forced main sewer.

- a. Parallel
- b. Next
- c. Adjacent
- d. As close as possible

222. No person may connect to a public sewer any building _____ through which is discharged any substance likely to cause undue corrosion, obstruction, nuisance, explosion or interference with sewage treatment processes.

- a. Drain
- b. Sewer
- c. Septic
- d. a or b

223. Except as provided in s. Comm 82.36 (3), _____ drain piping may not discharge to a sanitary building drain which connects to a publicly-owned treatment works.

- a. Storm
- b. Clear water
- c. Gray water
- d. a and b

224. Plumbing fixtures, except _____, shall be of the wall mounted type.

- a. Bathtubs
- b. Showers
- c. Urinals
- d. a and b

225. _____ shall have waste and overflow connections made above the floor and piped to a trap below the floor.

- a. Bathtubs
- b. Lavatories
- c. Drinking fountains
- d. Water closets

226. Floor and shower drains installed shall be equipped with _____ pans.

- a. Head
- b. Integral seepage
- c. Drain
- d. Shower

227. Where drain piping is located in ceilings of areas where _____ are prepared, handled stored or displayed, the ceilings shall be of the removable type, or shall be provided with access panels in order to provide an access for inspection of the piping.

- a. Food
- b. Ice
- c. Potable liquids
- d. All of the above

228. Exposed drain piping shall not be located over a pool, surge tank or an open filter for a pool.

- a. True
- b. False

Comm 82.31 Vents and venting systems

229. Drain stacks of more than _____ branch intervals shall be provided with yoke vents.

- a. 10
- b. 5
- c. 6
- d. 8

230. All vent terminals shall be located:

- a. At least 8 feet from an air intake; At least 5 feet from a power exhaust vent;
- b. At least 8 feet horizontally from or 2 feet above roof scuttles, doors and openable windows
- c. At least 3 feet from or 2 inches above parapet walls.
- d. None of the above

231. Where a structure has a(n) _____ roof extending from surrounding grade, the vent extension shall run at least 7 feet above grade and terminate with an approved vent cap.

- a. Flat
- b. Gable
- c. Earth covered
- d. Hip

232. The portion of vent pipe outside the structure shall be without joints, except _____ fitting may be installed where the pipe leaves the top or side of the structure.

- a. One
- b. Elbow
- c. Union
- d. Barb

233. Where approved by the department, a vent may _____ through an exterior wall.

- a. Continue
- b. Depart
- c. Terminate
- d. None of the above

234. Drain or vent pipe extensions shall not be located or placed on the outside of an exterior wall of any _____ building, but shall be located inside the building.

- a. Attached
- b. Commercial
- c. Pre-fabricated
- d. New

235. A _____ shall not be used for purposes other than the venting of the plumbing system.

- a. Vent
- b. Vent system
- c. Vent piping
- d. a or b

236. Vent piping from boiler blowoff basins shall not be connected to a vent or vent system serving a _____ drain system, storm drain system or chemical waste system.

- a. Branched
- b. Trench
- c. French
- d. Sanitary

237. Vent piping for _____ systems shall not be connected to a vent system serving a sanitary drain system or storm drain system.

- a. Chemical waste
- b. Sanitary drain
- c. Sewage drain
- d. Storm drain

238. Vents serving _____ sterilizers, cleansing or degreasing equipment, pressing machines or any other apparatus which normally discharges steam into the vent shall not be connected to a vent or a vent system serving a sanitary drain system, storm drain system or chemical waste system.

- a. Table top
- b. Autoclave
- c. Steam operated
- d. Dry heat

Comm 82.32 :Traps and direct fixture connections.

239. All traps shall be rigidly supported and set true with respect to the water level and so located as to protect the water seals, and shall be protected from _____ and evaporation.

- a. Cracking
- b. Freezing
- c. Leaking
- d. Heat

240. Except as provided in s. Comm 82.33, all plumbing fixtures and appliances discharging wastes shall connect _____ to a drain system.

- a. Tightly
- b. Directly
- c. Securely
- d. Safely

Comm 82.33: Indirect and local waste piping

241. Indirect waste piping and local waste piping draining the fixtures, appliances and devices having a public health _____, including but not limited to those listed in Table 82.33-1, shall be considered as plumbing and shall comply with the provisions of this section.

- a. Initiative
- b. Challenge
- c. Concern
- d. Risk

242. The air-break between indirect waste piping or local waste piping and the receptor shall be _____ by extending the indirect waste piping or local waste piping below the flood level rim of the receptor and terminating at an elevation above the trap outlet.

- a. Completed
- b. Attained
- c. Accomplished
- d. Reinforced

243. A receptor receiving the discharge from indirect waste piping or local waste piping shall be of a shape and capacity as to prevent _____ or flooding.

- a. Splashing
- b. Overflow
- c. Overspill
- d. Runoff

244. The _____ waste piping of a portable dishwasher or water treatment device serving one or 2 outlets may discharge into a kitchen sink of a dwelling unit or to a branch tail piece serving a kitchen sink.

- a. Indirect
- b. Cast-iron soil
- c. Single hub
- d. Rigid

245. The indirect waste piping of an automatic clothes washer or water treatment device may not discharge into a laundry tray.

- a. True
- b. False

246. The indirect or local waste piping _____ a cross connection control device or assembly, water treatment device, air conditioner, humidifier or furnace condensate may discharge into a branch tailpiece serving a laundry tray.

- a. Dividing
- b. Sharing
- c. Serving
- d. Linking

247. The local waste piping serving a water heater temperature and pressure relief valve, water treatment device, cross connection control device or assembly, humidifier, sterilizer, or a furnace or air conditioner may discharge into the _____ of a floor drain when installed in accordance with sub. (7) (b).

- a. Body
- b. Riser
- c. Clamp collar
- d. Top grate

248. The indirect or local waste piping serving a water heater temperature and pressure relief valve, water treatment device, cross connection control device or assembly, or a furnace or air conditioner may discharge to a floor served by a floor drain so as not to create a _____ hazard.

- a. Physical
- b. Environmental
- c. Workplace
- d. Health or safety

249. Except as provided in subd. 2. b., wastewater more than _____ ° F in temperature shall be discharged by means of indirect waste to the plumbing system.

- a. 120
- b. 130
- c. 150
- d. 160

250. Steam condensate blow down shall be cooled to 160°F in temperature prior to discharging to a plumbing system.

- a. True
- b. False

251. When discharging to a plumbing system, all _____ water shall discharge by means of an air-gap.

- a. Storm
- b. Clear
- c. Black
- d. Grey

252. Residential-type clothes washers shall discharge into the sanitary drain system by means of a(n) _____.

- a. Air gap
- b. Air-break
- c. High-loop
- d. Hydrostatic loop

253. Pumped-discharge automatic clothes washing equipment in _____ shall have the wastes discharge to a drain system by means of standpipes.

- a. Laundrettes
- b. Laundromats
- c. Self-service laundry establishments
- d. All of the above

254. Washer wastes shall not be discharged to gutters, troughs, local waste piping, indirect waste manifold or other similar connections.

- a. True
- b. False

255. Gravity discharge-type clothes washing equipment shall discharge by means of an air-break or by other approved methods into a _____.

- a. Floor receptor
- b. Trench
- c. Trough
- d. All of the above

256. The indirect waste piping from a residential– type dishwashing machine shall not exceed a developed length of _____ feet.

- a. 10
- b. 11
- c. 12
- d. 12.5

Comm 82.34: Wastewater treatment devices

257. Any deleterious waste material which is discharged into a plumbing system shall be _____ to a wastewater treatment device.

- a. Channeled
- b. Routed
- c. Released
- d. Directed

258. The wastewater treatment device shall be capable of _____ the deleterious waste material to a degree that the wastewater is no longer deleterious.

- a. Separating
- b. Diluting
- c. Neutralizing
- d. a, b, or c

259. Wastewater treatment devices that retain any waste materials shall be designed and installed to facilitate periodic _____.

- a. Removal
- b. Treatment
- c. Pumping
- d. a or b

260. Except as provided in subd. 2., wastewater discharged from water closets or urinals shall not be reused for drinking water or _____ for reuse.

- a. Allowed
- b. Intended
- c. Treated
- d. Permitted

261. All treatment works permitted by the _____, or a POWTS which includes an in situ soil dispersal or treatment component may treat wastewater discharged from water closets or urinals for reuse.

- a. Department of agriculture
- b. Department of health services
- c. Department of regulation and licensing
- d. Department of natural resources

262. The treatment or disposal system shall be installed so as not to _____ any water supply which is or may be used for drinking, culinary or bathing purposes, or which may create a nuisance, unsanitary conditions or water pollution.

- a. Change
- b. Affect
- c. Endanger
- d. Involve

263. Interceptors, catch basins and other similar devices shall be _____ so that flow rates shall be developed and maintained in a manner that solid and floating materials of a harmful, hazardous or deleterious nature will be collected in the interceptor for disposal.

- a. Designed
- b. Sized
- c. Installed
- d. All of the above

264. All devices installed for the purpose of intercepting, separating, collecting, or treating harmful, hazardous or deleterious materials in liquid or liquid-borne wastes shall be operated and cleaned of intercepted or collected materials or of any residual from treatment at such intervals which may be required to _____ their passage through the interceptor.

- a. Prevent
- b. Reduce
- c. Eliminate
- d. Stop

265. Any fixed orifice, vent or trap of an interceptor, catch basin or other similar device shall remain intact and shall not be removed or tampered with except for _____ purposes.

- a. Treating
- b. Cleaning
- c. Authorized
- d. Unusual

266. After _____, all parts of the interceptor, collector or treatment device, such as baffles, weirs, orifice plates, channels, vents, traps, tops, and fastening bolts or screws shall be replaced in proper working position.

- a. Repair
- b. Service
- c. Evaluation
- d. Modification

267. No interceptor, catch basin or similar device may be _____ or covered as to render it inaccessible for service or inspection.

- a. Enclosed
- b. Exposed
- c. Fastened
- d. Surrounded

268. No interceptor, catch basin or similar device may have its top located more than _____ feet above the surrounding floor.

- a. 6
- b. 3
- c. 4
- d. 5

269. Deleterious waste materials retained by an interceptor, catch basin or similar device shall not be _____ into any drain, sewer or natural body of water without approval of the state agency having jurisdiction.

- a. Introduced
- b. Allowed
- c. Permitted
- d. Released

270. All plumbing installations for occupancies, other than dwelling units, where grease, fats, oils or similar waste products of cooking or food are introduced into the drain system shall be provided with _____ in accordance with this subsection.

- a. Cleanouts
- b. Valves
- c. Interceptors
- d. Fixtures

271. Exterior grease interceptors shall receive the _____ waste discharge from kitchens or food processing areas.

- a. Trapped
- b. Entire
- c. Separated
- d. All of the above

272. Manhole risers for interceptor tanks shall be provided with a _____ cover of concrete, steel, cast iron or other approved material.

- a. Substantial
- b. Fitted
- c. Watertight
- d. All of the above

273. Manhole covers shall terminate _____ grade and shall have an approved locking device.

- a. At
- b. Above
- c. Below
- d. a or b

274. Where the tank _____ the septic tank and grease interceptor the label shall identify it as such.

- a. Replaces
- b. Acts as
- c. Controls
- d. Services

275. The minimum liquid capacity of a grease interceptor shall be determined in accordance with the provisions of this subdivision, except no grease interceptor may have a capacity of less than _____ gallons if the interceptor is to discharge to a private onsite wastewater treatment system or less than 750 gallons if the interceptor is to discharge to a municipal sewer system and treatment facility.

- a. 500
- b. 1000
- c. 800
- d. 900

276. Grease interceptor tanks may not be located within 5 feet of a building or any portion of the building or swimming pool; _____ feet of a water service; 2 feet of a lot line; _____ feet of a cistern or 25 feet of a reservoir or high water mark of a lake, stream, pond or flowage.

- a. 5
- b. 6
- c. 20
- d. 10

277. No water-cooled grease interceptor may be installed.

- a. True
- b. False

278. No grease interceptor may be located where the surrounding temperatures, under operating conditions, are less than _____ ° F.

- a. 40
- b. 35
- c. 43
- d. 41

279. Oil and flammable interceptors and separators shall be so designed to prevent the _____ of explosive gases.

- a. Discharge
- b. Release
- c. Formation
- d. Accumulation

280. The wastes from meat processing areas, slaughtering rooms and meat dressing rooms shall be discharged through an approved interceptor to prevent the discharge of _____ and other materials.

- a. Feathers
- b. Entrails
- c. Blood
- d. All of the above

Comm 82.35: Cleanouts

281. The cleanout shall be located within _____ feet of where the building drain and the building sewer connect.

- a. 5
- b. 6
- c. 7
- d. 8

282. The cleanout may only be located outside the building.

- a. True
- b. False

283. A cleanout in a drain stack may serve as the cleanout at the junction of the building drain and building sewer, if the stack is _____ 5 feet of where the building drain and building sewer connect.

- a. More than
- b. Less than
- c. Within
- d. Outside

284. Where a cleanout is provided in a drain stack, the cleanout shall be located _____ inches above the lowest floor penetrated by the stack.

- a. 26 to 58
- b. 28 to 60
- c. 30 to 60
- d. None of the above

285. Except as provided in subd. 2., cleanouts shall be provided in connection with batteries of fixtures at such points that all parts of the branch drain may be accessible for _____ of stoppages.

- a. Cleaning
- b. Removal
- c. Prevention
- d. a or b

286. Drain pipes carrying greasy wastes shall be provided with cleanouts located not more than 40 feet apart and at all changes in direction of more than _____ degrees.

- a. 40
- b. 45
- c. 50
- d. 60

287. Cleanout access for drain piping located in _____ spaces shall be provided by either extending the cleanout to at least the surface of a wall or floor or by providing access panels of a sufficient size to permit removal of the cleanout plug and proper cleaning of the pipe.

- a. Covered
- b. Approved
- c. Open
- d. Concealed

288. Cleanout openings shall not be used for the installation of fixtures or floor drains, except where another cleanout of equal _____ is provided.

- a. Access
- b. Capacity
- c. Thread
- d. a and b

289. Solid watertight manhole covers are to be used wherever the manhole tops may be _____ street runoff or high water.

- a. Exposed to
- b. Flooded by
- c. Affected by
- d. Have contact with

290. Where groundwater conditions are _____, manholes of brick or block shall be waterproofed on the exterior with plastic coatings supplemented by a bituminous waterproof coating or other approved coatings.

- a. Likely
- b. Favorable
- c. Unfavorable
- d. Possible

291. Inlet and outlet pipes are to be joined to the manhole with a _____ connection or any watertight connection arrangement that allows differential settlement of the pipe and manhole wall to take place.

- a. Gasketed
- b. Flexible
- c. Watertight
- d. All of the above

292. An outside drop pipe is to be _____ for a sewer entering a manhole where the invert elevation of the entering sewer is 2 feet or more above the spring line of the outgoing sewer.

- a. Introduced
- b. Supplied
- c. Installed
- d. Provided

Comm 82.36: Stormwater and clearwater plumbing

293. No storm building sewer or private interceptor main storm sewer may pass through or under a building to serve another building, unless one of the following conditions is met:

- a. The storm building sewer or private interceptor main storm sewer serves farm buildings or farm houses, or both, that are located on one property.
- b. Where a storm building sewer or private interceptor main storm sewer serves buildings that are located on one property, a document that indicates the piping and distribution arrangement for the property and buildings is recorded with the register of deeds no later than 90 days after installation.
- c. a or b
- d. Neither a or b

294. All underground stormwater storage tanks for water reuse shall be separated from sanitary sewers by a minimum of _____ feet.

- a. 8
- b. 6
- c. 10
- d. 5

295. Roof drain strainers used on sun decks, open parking decks and similar areas shall be of the _____ type, shall be level with the deck and shall have an available inlet area of not less than 2 times the area of the conductor to which the drain connects.

- a. Funnel
- b. Conventional
- c. Flat surface
- d. Approved

296. A stormwater or clearwater subsurface infiltration plumbing system consisting in part of in situ soil may not be installed if the soil is _____ at the infiltrative surface.

- a. Frozen
- b. Saturated
- c. Compacted
- d. Well-drained

297. Snow cover shall be _____ before excavating or installing a stormwater or clearwater system component consisting in part of in situ soil.

- a. Evaluated
- b. Considered
- c. Measured
- d. Removed

298. For a stormwater or clearwater subsurface infiltration plumbing system consisting in part of in situ soil, the soil _____ shall be evaluated immediately prior to installation of the component.

- a. Moisture content
- b. Condition
- c. Composition
- d. Type

299. Pursuant to s. 160.19 (2) (a), Stats., the department has determined that it is not technically or economically feasible to require that a stormwater or clearwater subsurface infiltration plumbing system treat wastewater to comply with the preventive action limit for _____ specified in ch. NR 140 Table 2, as existed on June 1, 1998.

- a. Nitrates
- b. Chloride
- c. Bacteria
- d. Chromium

300. Sanitary dump stations which are used to receive _____ wastes and _____ wastewater from the holding tanks of travel trailers, recreational vehicles or other similar mobile vehicles, and transfer containers shall conform with this subsection.

- a. Human
- b. Domestic
- c. Solid
- d. Commercial

301. One campsite receptor shall be designed to serve no more than ____ recreational vehicles.

- a. 2
- b. 3
- c. 4
- d. 5

302. Where 2 or more drain lines are designed to discharge into the same campsite receptor, an increaser shall be installed in the ____ portion of the trap riser to accommodate the drains.

- a. Vertical
- b. Horizontal
- c. Lateral
- d. Parallel

303. An accessible ____ valve shall be installed at the most upstream point of the campground water supply distribution system and downstream of the municipal meter or pressure tank.

- a. Control
- b. Emergency shut-off
- c. Globe
- d. Anti-siphon

Comm 82.38: Discharge points.

304. The provisions of this section set forth the requirements for the discharge points for ____ based on the use of the fixtures, appurtenances, appliances and devices discharging into the plumbing system.

- a. Ground water
- b. Wastewater
- c. Storm water
- d. Clear water

305. Lavatories located in park shelters and bath houses which are not open during the period from ____ and which are not places of employment shall not be required to be provided with hot water.

- a. September 15 to March 15
- b. October 15 to April 15
- c. December 16 to April 15
- d. November 15 to March 15

306. Lavatories located in _____ which are not places of employment shall not be required to be provided with hot water.

- a. Rest areas
- b. Rest stops
- c. Waysides
- d. Parks

307. When a water treatment device is provided to lower the concentration of a health-related contaminant, cross connection control shall be required to protect the water supply system downstream of the treatment device from the upstream contaminated source.

- a. True
- b. False

308. Where buildings or facilities contain water supply systems where the water supply systems have different _____ of hazard, all water supply systems shall be labeled in accordance with this section.

- a. Risks
- b. Degrees
- c. Area
- d. Levels

309. All aboveground piping supplying nonpotable water shall be labeled by tags or _____ bands.

- a. Yellow
- b. Blue
- c. Red
- d. Orange

310. Tags used to identify _____ water outlets, valves and piping shall be of metal or plastic in the shape of an equilateral triangle with 4 inch sides and bearing the legend "water unsafe" or other similar wording approved in writing by the department.

- a. Unpolluted
- b. Potable
- c. Nonpotable
- d. Hazardous

311. A _____ intended to discharge water that does not meet drinking water quality as specified in s. Comm 82.70, shall be labeled as nonpotable or so identified for the specific use or uses, and shall be equipped with a removable key handle.

- a. Wall hydrant
- b. Garden valve
- c. Ball valve
- d. Hose bibb

312. Where a building or a structure is served by 2 distribution systems, one system supplied by a public water supply and the other system supplied by a private well, each water distribution system shall be _____ to indicate the supply source.

- a. Labeled
- b. Identified
- c. Marked
- d. Tagged

313. The installation of each reduced pressure principle backflow preventer, reduced pressure detector backflow preventer, pressure vacuum breaker assembly, and back siphonage backflow vacuum breaker shall display a department assigned identification number. The provisions of this subdivision shall take effect _____.

- a. September 1, 2000
- b. September 1, 2001
- c. September 1, 2004
- d. September 1, 2006

314. The method to display the department assigned identification number shall be a weather-resistant tag, securely attached to the _____.

- a. Cross connection control assembly
- b. Pressure vacuum breaker assembly
- c. Back siphonage backflow vacuum breaker
- d. None of the above

315. The tag shall contain at least the following information:

- a. Wisconsin Department of Commerce and Identification/Object Number _____
- b. Cross Connection Control Assembly
- c. Do Not Remove This Tag
- d. All of the above

316. If the water service connects to a public water supply or to a private water supply which has an external pressure tank, the building control valve shall be installed inside the building and located within _____ feet of developed length from the point where the water service first enters the building.

- a. 2
- b. 3
- c. 4
- d. 5

317. If a water meter is provided, the building control valve shall be located downstream of the water meter.

- a. True
- b. False

318. A _____ valve shall be installed in the supply piping to each water heater and water treatment device and in the fixture supply to each plumbing fixture, plumbing appliance and piece of equipment.

- a. Conventional
- b. Service
- c. Pressure
- d. Control

319. If a hot water circulation system is provided, a control valve shall be installed on both the inlet and outlet piping to the circulation pump.

- a. True
- b. False

320. The water distribution system for buildings with more than ____ dwelling units or living units shall be provided with control valves in such numbers and at such locations so that the water supplied to all the units within the building can be isolated into groups of ____ of less units.

- a. 2
- b. 3
- c. 4
- d. 5

Chapter Comm 84

321. _____ means a plumbing appliance, the function of which is unique to health care activities.

- a. Health care plumbing appliance
- b. Bread maker
- c. Pipe wrench
- d. Ice machine

322. _____ means concealed drain piping, vent piping or water supply piping or a combination of these types of piping, contained in a modular building component, which will not be visible for inspection when delivered to the final site of installation.

- a. Drain stack
- b. Control valve
- c. Prefabricated plumbing
- d. Plumbing fixture

323. _____ means a plumbing appliance, the function of which is unique to scientific experimentation or research activities.

- a. Integral trap
- b. Water softener
- c. Water heater
- d. Laboratory plumbing appliance

324. No _____, material, device or product may be sold for use in a plumbing system or may be installed in a plumbing system, unless it is of a type conforming to the standards or specifications of chs. Comm 82 and 83 and this chapter and ch. 145, Stats.

- a. fixture
- b. appliance
- c. appurtenance
- d. all of the above.

325. If it is alleged that the approval of a fixture, appliance, appurtenance, material, device or product under this section would result in an adverse health effect or potentially adverse health effect on the waters of the state, the department may require an alternate or experimental product approval under s. Comm 84.50.

- a. True
- b. False

326. Each type of plumbing product which falls into one of the categories specified in Table 84.10 shall Not be approved by the department in accordance with this subsection before the product may be sold for use in a plumbing system or installed in a plumbing system.

- a. True
- b. False

327. Specifications and plans or drawings for each type of product shall not be required by the department for review.

- a. True
- b. False

328. The department may require that a submitter of a product for review have the product tested and its performance certified by an approved testing laboratory.

- a. True
- b. False

329. If, upon review, the department determines that a product conforms to the provisions of chs. Comm 82, 83 and this chapter and ch. 145, Stats., the department shall issue an approval in writing.

- a. True
- b. False

330. If, upon review, the department determines that a product does not conform to provisions of chs. Comm 82, 83 and this chapter and ch. 145, Stats., the request for approval shall be denied in writing.

- a. True
- b. False

331. The department shall review and make a determination on an application for a product approval within 60 business days of receipt of all fees, plans, drawings, specifications and other information required to complete the review.

- a. True
- b. False

332. If an approved plumbing product is modified or additional assertions of function or performance are made, the approval shall be considered null and void, unless the change is submitted to the department for review and the approval is reaffirmed.

- a. True
- b. False

333. Approvals for plumbing products issued by the department prior to November 1, 1985, shall expire 60 months after the effective date of this section

- a. True
- b. False

334. Approvals for plumbing products issued by the department after November 1, 2008, shall expire at the end of the 36th month after the date of approval issuance.

- a. True
- b. False

335. The department may issue an approval, upon request and review, for specific methods or technologies that are proposed to be utilized as POWTS holding, treatment or dispersal components which conform to the standards or specifications referenced in chs. Comm 192.

- a. True
- b. False

Comm 84.10 (3) (b)

336. Each request for approval shall be made on a 3'' x 5'' post card.

- a. True.
- b. False

Comm 84.10 (3) (c)

Circle only the correct answers.

337-347. The submittal shall be accompanied by sufficient data and information to determine if the method or technology complies with the provisions of chs. Comm 81, 82 and 83, and this chapter. The submittal shall include, but not be limited to, all of the following:

- a. Plans and specifications.
- b. Theory of operation.
- c. Estimated Cost
- d. Testing protocol.
- e. Testing data.
- f. Limits of reliable operation.
- g. Index page
- h. Appendix
- i. Installation requirements and procedures.
- j. Inspection checklist and worksheet.
- k. Inspection requirements and procedures.
- l. Operation and maintenance requirements.
- m. Ten year projected outlook
- n. Reliability chart
- o. Operation and maintenance schedule.
- p. Operation and maintenance checklist and worksheet.

Comm 84.10 (3) (d) 2.

Circle only the correct answers.

348-354. The members on the technical advisory committee under subd. 1. shall be appointed by the department for staggered 3-year terms and shall include representatives of at least the following groups or organizations:

- a. Local homebuilders association.
- b. The department of natural resources.
- c. Home inspector.
- d. Pipe fitter.
- e. Local governmental unit.
- f. POWTS installer.
- g. POWTS designer.
- h. Academic or scientific community.
- i. Utility contractor.
- j. Engineer.
- k. Plumber.
- l. Biologist
- m. Environmental group.
- n. POWTS component manufacturer.

355. After review by the technical advisory committee under par. (d) but prior to issuing an approval under par. (f), the department shall seek public _____ on a submittal under this subsection.

- a. restitution
- b. comments
- c. vindication
- d. approval

356. The department shall place the notice requesting public comment under subd. 1. in the official state _____.

- a. magazine
- b. blog
- c. newspaper
- d. website

357. The department shall include a time limit for _____ comment in each notice.

- a. outspoken
- b. public
- c. private
- d. boring

358. If, upon review, the department determines that the method or technology conforms to the provisions of chs. Comm 81, 82 and 83 and this chapter, the department shall issue an approval in _____.

- a. writing
- b. text message
- c. triplicate
- d. legalese

359. The department may impose specific _____ in granting an approval, including a provision...

- a. conditions
- b. reasoning
- c. guides
- d. gratuities

360. The department shall review and make a determination on an application for a method or technology approval within _____ of receipt of all fees, plans, drawings, specifications and other information required to complete the review, unless the department elects to review the method or technology as part of the rule-making process under ch. 227, Stats.

- a. 1 months.
- b. 3 months.
- c. 6 months.
- d. 9 months.

Plumbing Continuing Education Test 16

Answer Sheet

Circle or Mark the Correct Answer

- | | | | | | | | | | | | | | | | | | | | |
|-----|---|---|---|---|-----|---|---|---|---|------|---|---|---|---|------|---|---|---|---|
| 1. | a | b | c | d | 49. | a | b | c | d | 97. | a | b | c | d | 145. | a | b | c | d |
| 2. | a | b | c | d | 50. | a | b | c | d | 98. | a | b | c | d | 146. | a | b | c | d |
| 3. | a | b | c | d | 51. | a | b | c | d | 99. | a | b | c | d | 147. | a | b | c | d |
| 4. | a | b | c | d | 52. | a | b | c | d | 100. | a | b | c | d | 148. | a | b | c | d |
| 5. | a | b | c | d | 53. | a | b | c | d | 101. | a | b | c | d | 149. | a | b | c | d |
| 6. | a | b | c | d | 54. | a | b | c | d | 102. | a | b | c | d | 150. | a | b | c | d |
| 7. | a | b | c | d | 55. | a | b | c | d | 103. | a | b | c | d | 151. | a | b | c | d |
| 8. | a | b | c | d | 56. | a | b | c | d | 104. | a | b | c | d | 152. | a | b | c | d |
| 9. | a | b | c | d | 57. | a | b | c | d | 105. | a | b | c | d | 153. | a | b | c | d |
| 10. | a | b | c | d | 58. | a | b | c | d | 106. | a | b | c | d | 154. | a | b | c | d |
| 11. | a | b | c | d | 59. | a | b | c | d | 107. | a | b | c | d | 155. | a | b | c | d |
| 12. | a | b | c | d | 60. | a | b | c | d | 108. | a | b | c | d | 156. | a | b | c | d |
| 13. | a | b | c | d | 61. | a | b | c | d | 109. | a | b | c | d | 157. | a | b | c | d |
| 14. | a | b | c | d | 62. | a | b | c | d | 110. | a | b | c | d | 158. | a | b | c | d |
| 15. | a | b | c | d | 63. | a | b | c | d | 111. | a | b | c | d | 159. | a | b | c | d |
| 16. | a | b | c | d | 64. | a | b | c | d | 112. | a | b | c | d | 160. | a | b | c | d |
| 17. | a | b | c | d | 65. | a | b | c | d | 113. | a | b | c | d | 161. | a | b | c | d |
| 18. | a | b | c | d | 66. | a | b | c | d | 114. | a | b | c | d | 162. | a | b | c | d |
| 19. | a | b | c | d | 67. | a | b | c | d | 115. | a | b | c | d | 163. | a | b | c | d |
| 20. | a | b | c | d | 68. | a | b | c | d | 116. | a | b | c | d | 164. | a | b | c | d |
| 21. | a | b | c | d | 69. | a | b | c | d | 117. | a | b | c | d | 165. | a | b | c | d |
| 22. | a | b | c | d | 70. | a | b | c | d | 118. | a | b | c | d | 166. | a | b | c | d |
| 23. | a | b | c | d | 71. | a | b | c | d | 119. | a | b | c | d | 167. | a | b | c | d |
| 24. | a | b | c | d | 72. | a | b | c | d | 120. | a | b | c | d | 168. | a | b | c | d |
| 25. | a | b | c | d | 73. | a | b | c | d | 121. | a | b | c | d | 169. | a | b | c | d |
| 26. | a | b | c | d | 74. | a | b | c | d | 122. | a | b | c | d | 170. | a | b | c | d |
| 27. | a | b | c | d | 75. | a | b | c | d | 123. | a | b | c | d | 171. | a | b | c | d |
| 28. | a | b | c | d | 76. | a | b | c | d | 124. | a | b | c | d | 172. | a | b | c | d |
| 29. | a | b | c | d | 77. | a | b | c | d | 125. | a | b | c | d | 173. | a | b | c | d |
| 30. | a | b | c | d | 78. | a | b | c | d | 126. | a | b | c | d | 174. | a | b | c | d |
| 31. | a | b | c | d | 79. | a | b | c | d | 127. | a | b | c | d | 175. | a | b | c | d |
| 32. | a | b | c | d | 80. | a | b | c | d | 128. | a | b | c | d | 176. | a | b | c | d |
| 33. | a | b | c | d | 81. | a | b | c | d | 129. | a | b | c | d | 177. | a | b | c | d |
| 34. | a | b | c | d | 82. | a | b | c | d | 130. | a | b | c | d | 178. | a | b | c | d |
| 35. | a | b | c | d | 83. | a | b | c | d | 131. | a | b | c | d | 179. | a | b | c | d |
| 36. | a | b | c | d | 84. | a | b | c | d | 132. | a | b | c | d | 180. | a | b | c | d |
| 37. | a | b | c | d | 85. | a | b | c | d | 133. | a | b | c | d | 181. | a | b | c | d |
| 38. | a | b | c | d | 86. | a | b | c | d | 134. | a | b | c | d | 182. | a | b | c | d |
| 39. | a | b | c | d | 87. | a | b | c | d | 135. | a | b | c | d | 183. | a | b | c | d |
| 40. | a | b | c | d | 88. | a | b | c | d | 136. | a | b | c | d | 184. | a | b | c | d |
| 41. | a | b | c | d | 89. | a | b | c | d | 137. | a | b | c | d | 185. | a | b | c | d |
| 42. | a | b | c | d | 90. | a | b | c | d | 138. | a | b | c | d | 186. | a | b | c | d |
| 43. | a | b | c | d | 91. | a | b | c | d | 139. | a | b | c | d | 187. | a | b | c | d |
| 44. | a | b | c | d | 92. | a | b | c | d | 140. | a | b | c | d | 188. | a | b | c | d |
| 45. | a | b | c | d | 93. | a | b | c | d | 141. | a | b | c | d | 189. | a | b | c | d |
| 46. | a | b | c | d | 94. | a | b | c | d | 142. | a | b | c | d | 190. | a | b | c | d |
| 47. | a | b | c | d | 95. | a | b | c | d | 143. | a | b | c | d | 191. | a | b | c | d |
| 48. | a | b | c | d | 96. | a | b | c | d | 144. | a | b | c | d | 192. | a | b | c | d |

Plumbing Continuing Education Test 16

Answer Sheet (Continued)

193.	a b c d	241.	a b c d	289.	a b c d	337-	a b c d
194.	a b c d	242.	a b c d	290.	a b c d		e f g h
195.	a b c d	243.	a b c d	291.	a b c d		I j k l
196.	a b c d	244.	a b c d	292.	a b c d	347.	m n o p
197.	a b c d	245.	a b c d	293.	a b c d	348-	a b c d
198.	a b c d	246.	a b c d	294.	a b c d		e f g h
199.	a b c d	247.	a b c d	295.	a b c d		I j k l
200.	a b c d	248.	a b c d	296.	a b c d	354.	m n
201.	a b c d	249.	a b c d	297.	a b c d	355.	a b c d
202.	a b c d	250.	a b c d	298.	a b c d	256.	a b c d
203.	a b c d	251.	a b c d	299.	a b c d	257.	a b c d
204.	a b c d	252.	a b c d	300.	a b c d	358.	a b c d
205.	a b c d	253.	a b c d	301.	a b c d	359.	a b c d
206.	a b c d	254.	a b c d	302.	a b c d	360.	a b c d
207.	a b c d	255.	a b c d	303.	a b c d		
208.	a b c d	256.	a b c d	304.	a b c d		
209.	a b c d	257.	a b c d	305.	a b c d		
210.	a b c d	258.	a b c d	306.	a b c d		
211.	a b c d	259.	a b c d	307.	a b c d		
212.	a b c d	260.	a b c d	308.	a b c d		
213.	a b c d	261.	a b c d	309.	a b c d		
214.	a b c d	262.	a b c d	310.	a b c d		
215.	a b c d	263.	a b c d	311.	a b c d		
216.	a b c d	264.	a b c d	312.	a b c d		
217.	a b c d	265.	a b c d	313.	a b c d		
218.	a b c d	266.	a b c d	314.	a b c d		
219.	a b c d	267.	a b c d	315.	a b c d		
220.	a b c d	268.	a b c d	316.	a b c d		
221.	a b c d	269.	a b c d	317.	a b c d		
222.	a b c d	270.	a b c d	318.	a b c d		
223.	a b c d	271.	a b c d	319.	a b c d		
224.	a b c d	272.	a b c d	320.	a b c d		
225.	a b c d	273.	a b c d	321.	a b c d		
226.	a b c d	274.	a b c d	322.	a b c d		
227.	a b c d	275.	a b c d	323.	a b c d		
228.	a b c d	276.	a b c d	324.	a b c d		
229.	a b c d	277.	a b c d	325.	a b c d		
230.	a b c d	278.	a b c d	326.	a b c d		
231.	a b c d	279.	a b c d	327.	a b c d		
232.	a b c d	280.	a b c d	328.	a b c d		
233.	a b c d	281.	a b c d	329.	a b c d		
234.	a b c d	282.	a b c d	330.	a b c d		
235.	a b c d	283.	a b c d	331.	a b c d		
236.	a b c d	284.	a b c d	332.	a b c d		
237.	a b c d	285.	a b c d	333.	a b c d		
238.	a b c d	286.	a b c d	334.	a b c d		
239.	a b c d	287.	a b c d	335.	a b c d		
240.	a b c d	288.	a b c d	336.	a b c d		

Name and Credential Number

Date

To obtain your WI continuing education credits follow the below instructions.

1. If taking the same quiz more than once per cycle, fill out the forms with different dates.
2. Fill in all fields applicable.
3. Include your credential or license number.
4. We take care of registering with the state and mailing back the test results.

FYI: The state allows a person to take the same course more than once (several times) per cycle.

Send by mail

1. Test answer sheets, fee, and the following form.
 2. Fill out this form below completely.
 3. Make check or Money Order to Brett Or Kathy Ward
 4. Mail to: Yourwicontinuinged.com P.O. Box 36 Kaukauna WI 54130.
- Questions call: 920-740-4348

-----Educational Course Attendance Verification Form -----

Attendee's Name _____
Address _____
Date _____

Credential Number _____
Phone# _____
Fax# _____

Course Title and Name Plumbing Continuing Education Test 16
Credited Hours 12 hrs
List the name of each credential held by attendee _____

Email address _____

To be completed by Brett or Kathy Ward yourwicontinuinged.com

Course Password _____ Course ID# 10161

Attendee passed the correspondence quiz with greater than 70% score _____
Date

Instructor Signature _____