

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 7

Comm 81.01: Definitions

1. _____ 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

2. _____ 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

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

- a. True
- b. False

4. _____ 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

5. _____ 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

6. _____ 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

7. _____ 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

8. _____ 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

9. _____ 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

10. _____ 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

11. _____ 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

12. _____ 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

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

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

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

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

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

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

16. _____ 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

17. _____ (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

18. _____ 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

19. _____ 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

20. _____ 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

Comm 82.30: Sanitary drain systems

21. 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

22. 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

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

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

24. 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

25. 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

26. 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

27. 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

28. 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

29. 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

30. 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

31. 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

32. 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

33. 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

34. 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

35. 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

36. 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

37. 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

38. 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

39. 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

40. 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

41. 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

42. 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

43. 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

44. 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

45. 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

46. 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

47. _____ 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
48. Backwater valves shall be so located as to be readily accessible for _____ .
- a. Flushing
 - b. Cleaning
 - c. Appraisal
 - d. Adjustment
49. 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
50. 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
51. 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
52. 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

53. 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

54. 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

55. 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

56. 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

57. 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

58. _____ shall not be used in the backfill.

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

59. 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

60. 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

Plumbing Continuing Education Test 7 Answer Sheet

Circle or Mark the correct answer.

- | | | | | | | | | | |
|-----|---|---|---|---|-----|---|---|---|---|
| 1. | a | b | c | d | 47. | a | b | c | d |
| 2. | a | b | c | d | 48. | a | b | c | d |
| 3. | a | b | c | d | 49. | a | b | c | d |
| 4. | a | b | c | d | 50. | a | b | c | d |
| 5. | a | b | c | d | 51. | a | b | c | d |
| 6. | a | b | c | d | 52. | a | b | c | d |
| 7. | a | b | c | d | 53. | a | b | c | d |
| 8. | a | b | c | d | 54. | a | b | c | d |
| 9. | a | b | c | d | 55. | a | b | c | d |
| 10. | a | b | c | d | 56. | a | b | c | d |
| 11. | a | b | c | d | 57. | a | b | c | d |
| 12. | a | b | c | d | 58. | a | b | c | d |
| 13. | a | b | c | d | 59. | a | b | c | d |
| 14. | a | b | c | d | 60. | a | b | c | d |
| 15. | a | b | c | d | | | | | |
| 16. | a | b | c | d | | | | | |
| 17. | a | b | c | d | | | | | |
| 18. | a | b | c | d | | | | | |
| 19. | a | b | c | d | | | | | |
| 20. | a | b | c | d | | | | | |
| 21. | a | b | c | d | | | | | |
| 22. | a | b | c | d | | | | | |
| 23. | a | b | c | d | | | | | |
| 24. | a | b | c | d | | | | | |
| 25. | a | b | c | d | | | | | |
| 26. | a | b | c | d | | | | | |
| 27. | a | b | c | d | | | | | |
| 28. | a | b | c | d | | | | | |
| 29. | a | b | c | d | | | | | |
| 30. | a | b | c | d | | | | | |
| 31. | a | b | c | d | | | | | |
| 32. | a | b | c | d | | | | | |
| 33. | a | b | c | d | | | | | |
| 34. | a | b | c | d | | | | | |
| 35. | a | b | c | d | | | | | |
| 36. | a | b | c | d | | | | | |
| 37. | a | b | c | d | | | | | |
| 38. | a | b | c | d | | | | | |
| 39. | a | b | c | d | | | | | |
| 40. | a | b | c | d | | | | | |
| 41. | a | b | c | d | | | | | |
| 42. | a | b | c | d | | | | | |
| 43. | a | b | c | d | | | | | |
| 44. | a | b | c | d | | | | | |
| 45. | a | b | c | d | | | | | |
| 46. | 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 7

Credited Hours 2 hrs

List the name of each credential held by attendee _____

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To be completed by Brett or Kathy Ward yourwicontinuinged.com

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

Instructor Signature _____