

ANSWER SHEET • UPC Definitions • Course No. WA2023-327 • Washington

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_ Date: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

License #: \_\_\_\_\_ Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Last four numbers of SSN (required): \_\_\_\_\_

INSTRUCTIONS TO SUBMIT EXAM

Option 1:



1. Pay online at [pay.apiceu.com/WA](https://pay.apiceu.com/WA) (or scan QR code)
2. Email your answer sheet(s) to [exam@apiceu.com](mailto:exam@apiceu.com)

Option 2:

1. Mail your answer sheets\* and a check payable to  
**American Plumbing Institute to:**  
American Plumbing Institute  
PO Box 1445  
Queen Creek, AZ 85142

*\*If you prefer, you may FAX your answer sheets to 888-246-9280.*

- |   |   |   |   |
|---|---|---|---|
| 1. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D  | 21. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 41. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 61. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 2. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D  | 22. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 42. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 62. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 3. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D  | 23. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 43. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 63. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 4. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D  | 24. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 44. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 64. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 5. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D  | 25. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 45. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 65. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 6. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D  | 26. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 46. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 66. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 7. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D  | 27. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 47. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 67. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 8. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D  | 28. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 48. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 68. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 9. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D  | 29. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 49. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 69. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 10. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 30. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 50. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 70. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 11. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 31. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 51. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 71. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 12. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 32. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 52. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 72. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 13. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 33. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 53. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 73. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 14. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 34. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 54. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 74. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 15. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 35. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 55. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 75. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 16. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 36. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 56. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 76. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 17. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 37. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 57. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 77. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 18. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 38. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 58. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 78. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 19. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 39. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 59. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 79. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 20. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 40. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 60. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 80. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |



81. ☐ A ☐ B ☐ C ☐ D
82. ☐ A ☐ B ☐ C ☐ D
- 
83. ☐ A ☐ B ☐ C ☐ D
84. ☐ A ☐ B ☐ C ☐ D
85. ☐ A ☐ B ☐ C ☐ D
86. ☐ A ☐ B ☐ C ☐ D
87. ☐ A ☐ B ☐ C ☐ D
88. ☐ A ☐ B ☐ C ☐ D
89. ☐ A ☐ B ☐ C ☐ D
90. ☐ A ☐ B ☐ C ☐ D
91. ☐ A ☐ B ☐ C ☐ D
92. ☐ A ☐ B ☐ C ☐ D
93. ☐ A ☐ B ☐ C ☐ D
94. ☐ A ☐ B ☐ C ☐ D
95. ☐ A ☐ B ☐ C ☐ D

96. ☐ A ☐ B ☐ C ☐ D
- 
97. ☐ A ☐ B ☐ C ☐ D
98. ☐ A ☐ B ☐ C ☐ D
99. ☐ A ☐ B ☐ C ☐ D
100. ☐ A ☐ B ☐ C ☐ D
101. ☐ A ☐ B ☐ C ☐ D
102. ☐ A ☐ B ☐ C ☐ D
103. ☐ A ☐ B ☐ C ☐ D
- 
104. ☐ A ☐ B ☐ C ☐ D
105. ☐ A ☐ B ☐ C ☐ D
106. ☐ A ☐ B ☐ C ☐ D
107. ☐ A ☐ B ☐ C ☐ D
108. ☐ A ☐ B ☐ C ☐ D
109. ☐ A ☐ B ☐ C ☐ D
110. ☐ A ☐ B ☐ C ☐ D

111. ☐ A ☐ B ☐ C ☐ D
112. ☐ A ☐ B ☐ C ☐ D
113. ☐ A ☐ B ☐ C ☐ D
114. ☐ A ☐ B ☐ C ☐ D
115. ☐ A ☐ B ☐ C ☐ D
116. ☐ A ☐ B ☐ C ☐ D
117. ☐ A ☐ B ☐ C ☐ D
- 
118. ☐ A ☐ B ☐ C ☐ D
119. ☐ A ☐ B ☐ C ☐ D
120. ☐ A ☐ B ☐ C ☐ D
121. ☐ A ☐ B ☐ C ☐ D
122. ☐ A ☐ B ☐ C ☐ D
123. ☐ A ☐ B ☐ C ☐ D
124. ☐ A ☐ B ☐ C ☐ D
125. ☐ A ☐ B ☐ C ☐ D

126. ☐ A ☐ B ☐ C ☐ D
127. ☐ A ☐ B ☐ C ☐ D
128. ☐ A ☐ B ☐ C ☐ D
129. ☐ A ☐ B ☐ C ☐ D
130. ☐ A ☐ B ☐ C ☐ D
131. ☐ A ☐ B ☐ C ☐ D
132. ☐ A ☐ B ☐ C ☐ D
133. ☐ A ☐ B ☐ C ☐ D
134. ☐ A ☐ B ☐ C ☐ D
135. ☐ A ☐ B ☐ C ☐ D
136. ☐ A ☐ B ☐ C ☐ D
137. ☐ A ☐ B ☐ C ☐ D
138. ☐ A ☐ B ☐ C ☐ D
139. ☐ A ☐ B ☐ C ☐ D
140. ☐ A ☐ B ☐ C ☐ D





# American Plumbing Institute

Affordable and Easy to Use Continuing Education for Plumbers

## WASHINGTON PLUMBERS --- CONTINUING EDUCATION

[www.apiceu.com](http://www.apiceu.com)

### **2021 UPC Definitions** Course No. WA2023-327 • 4 hours

DISCLAIMER NOTE: This course is APPROVED by the Washington State Plumbing Board for continuing education to renew your plumbing license and is not intended to replace or supersede any state or local adopted codes.

## 2021 UPC Definitions

**Bed Pan Steamer:** A fixture that is used to sterilize bedpans by way of steam.

**Category 3:** Activity, systems, or equipment whose failure is not likely to cause injury to patient, staff, or visitors, but can cause discomfort.

**Exam Room Sink:** A Sink used in the patient exam room of a medical or dental office with a primary purpose of the washing of hands.

**Dry Vent:** A Vent that does not receive the discharge of any sewage or waste.

**Fixture Fitting:** A device that controls and guides the flow of water.

**Grounding Electrode:** A conducting object through which a direct connection to earth is established.

**Approved:** Acceptable to the Authority Having Jurisdiction.

**Joint, Flanged:** One made by bolting together a pair of flanged ends.

**Scavenging:** Evacuation of exhaled mixtures of oxygen and nitrous oxide.

**Sterilizer:** A piece of equipment that disinfects instruments and equipment by way of heat.

**ABS.** Acrylonitrile-butadiene-styrene.

**Aspirator.** A fitting or device supplied with water or other fluid under positive pressure that passes through an integral orifice or constriction, causing a vacuum.

**Authority Having Jurisdiction.** The organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, installations, or procedures. The Authority Having Jurisdiction shall be a federal, state, local, or other regional department or an individual such as a plumbing official, mechanical official, labor department official, health department official, building official, or others having statutory authority. In the absence of a statutory authority, the Authority Having Jurisdiction may be some other responsible party. This definition shall include the Authority Having Jurisdiction's duly authorized representative.



### Exam Questions:

1. The organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, installations, or procedures would be best defined as?
  - A. The Department
  - B. State Board
  - C. Authority Having Jurisdiction
  - D. Testing Laboratory
2. How does a bed pan steamer sterilize bed pans?
  - A. Uses High Temperature Steam
  - B. Uses High Temperature Water jets
  - C. Uses pulsating high speed plastic pellets
  - D. Uses Liquid nitrogen and air pulses

3. **What category can cause patient discomfort if the facility's equipment were to fail?**
  - A. III
  - B. II
  - C. I
  - D. IV
4. **What is the primary purpose of an exam room sink?**
  - A. Washing of hands
  - B. Washing of instruments
  - C. Water for the Patient
  - D. All listed answers
5. **What does "ABS" stand for?**
  - A. Alonitrile-butadiene-styrene
  - B. Acrylonitrile-butane-styrene
  - C. Acrylonitrile-butadiene-styrene
  - D. Acrylontile-butadiene-styrene
6. **What best defines a vent that does not receive the discharge of any sewage or waste?**
  - A. Dry Vent
  - B. Wet Vent
  - C. Branch Vent
  - D. Main Vent
7. **What controls and guides the flow of water?**
  - A. Fixture Fitting
  - B. Nozzle
  - C. Fixture
  - D. Spigot
8. **A conducting object through which a direct connection to the earth is established is best defined as a?**
  - A. Grounding Electrode
  - B. Grounding Electrode Conductor
  - C. Equipment Grounding Conductor
  - D. Grounded Conductor
9. **What is a fitting or device supplied with water or other fluid under positive pressure that passes through an integral orifice or constriction, causing a vacuum?**
  - A. Aspirator
  - B. Backflow Preventer
  - C. Backflow Connector
  - D. Appliance Fuel Connector
10. **What does acceptable to the Authority Having Jurisdiction most commonly mean?**
  - A. Approved
  - B. Satisfied
  - C. Suggested
  - D. All listed answers
11. **What is considered bolting together a pair of flanged ends?**
  - A. Joint, Flanged
  - B. Flanged, Joint
  - C. Joint, Flared
  - D. Joint, Mechanical
12. **What is known as the evacuation of exhaled mixtures of oxygen and nitrous oxide?**
  - A. Scavenging
  - B. Expelling
  - C. Expel
  - D. Arterial gas embolism
13. **How does a Sterilizer disinfect instruments and equipment?**
  - A. Uses High Temperature Steam
  - B. Uses High Temperature Heat
  - C. Uses pulsating high speed plastic pellets
  - D. Uses Liquid nitrogen and air pulses

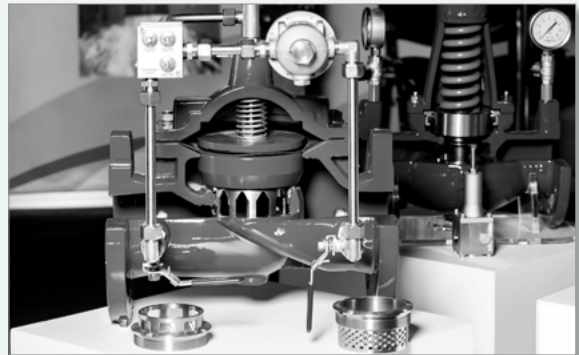
**Backflow.** The flow of water or other liquids, mixtures, or substances into the distributing pipes of a potable supply of water from sources other than its intended source. See Backpressure, Backflow, and Backsiphonage.

**Backflow Connection.** An arrangement whereby backflow can occur.

**Backflow Preventer.** A backflow prevention device, an assembly, or other method to prevent backflow into the potable water system.

**Backpressure Backflow.** Backflow due to an increased pressure above the supply pressure, which may be due to pumps, boilers, gravity, or other sources of pressure.

**Backsiphonage.** The flowing back of used, contaminated, or polluted water from a plumbing fixture or vessel into a water supply pipe due to a pressure less than atmospheric in such pipe. See Backflow.



**Backwater Valve.** A device installed in a drainage system to prevent reverse flow.

**Bathroom Group.** Any combination of fixtures, not to exceed one water closet, two lavatories, either one bathtub, or one combination bath/shower, and one shower, and may include a bidet and an emergency floor drain.

**Bathroom, Half.** A room equipped with only a water closet and lavatory.

**Battery of Fixtures.** A group of two or more similar, adjacent fixtures that discharge into a common horizontal waste or soil branch.

**Boiler Blowoff.** An outlet on a boiler to permit emptying or discharge of sediment.

**Bonding Conductor or Jumper.** A reliable conductor to ensure the required electrical conductivity between metal parts required to be electrically connected.

**Branch Vent.** A vent connecting one or more individual vents with a vent stack or stack vent.

**Building.** A structure built, erected, and framed of component structural parts designed for the housing, shelter, enclosure, or support of persons, animals, or property of any kind.

**Building Drain.** That part of the lowest piping of a drainage system that receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer beginning 2 feet (610 mm) outside the building wall.

**Building Drain (Sanitary).** A building drain that conveys sewage only.

**Building Drain (Storm).** A building drain that conveys storm water or other drainage, but no sewage.

**Building Sewer.** That part of the horizontal piping of a drainage system that extends from the end of the building drain and that receives the discharge of the building drain and conveys it to a public sewer, private sewer, private sewage disposal system, or other point of disposal.

**Branch.** A part of the piping system other than a main, riser, or stack.

**Building Sewer (Combined).** A building sewer that conveys both sewage and storm water or other drainage.

**Building Sewer (Sanitary).** A building sewer that conveys sewage only.



## Exam Questions:

14. **A part of the piping system other than a main, riser, or stack is defined as a?**
  - A. Vent
  - B. Fixture Branch
  - C. Branch
  - D. Branch, Fixture
15. **A building sewer that conveys sewage only is known as?**
  - A. Building Sewer (Dedicated)
  - B. Building Sewer (Storm)
  - C. Building Sewer (Combined)
  - D. Building Sewer (Sanitary)
16. **The backflow due to an increased pressure above the supply pressure, which may be due to pumps, boilers, gravity, or other sources of pressure is best defined as?**
  - A. Backflow
  - B. Backflow Connection
  - C. Backpressure Backflow
  - D. Backflow Preventer
17. **What is defined as the flow of water or other liquids, mixtures, or substances into the distributing pipes of a potable supply of water from sources other than its intended source?**
  - A. Backflow
  - B. Backflow Connection
  - C. Backpressure Backflow
  - D. Backflow Preventer
18. **An outlet on a boiler to permit emptying or discharge of sediment is defined as?**
  - A. Blowoff Valve
  - B. Boiler Blowoff
  - C. Emergency Blowoff Valve
  - D. Boiler Butterfly Blowoff Valve
19. **What best defines a backflow prevention device, an assembly, or other method to prevent backflow into the potable water system?**
  - A. Backflow
  - B. Backflow Connection
  - C. Backpressure Backflow
  - D. Backflow Preventer
20. **What is the flowing back of used, contaminated, or polluted water from a plumbing fixture or vessel into a water supply pipe due to a pressure less than atmospheric in such pipe?**
  - A. Backpressure Backflow
  - B. Backflow Connection
  - C. Backsiphonage
  - D. Backflow Preventer
21. **A group of fixtures consisting of a water closet, one or two lavatories, and either a bathtub, a combination bath/shower, or a shower and may include a urinal or bidet and an emergency floor drain is defined as?**
  - A. Restroom
  - B. Water Closet
  - C. Powder Room
  - D. Bathroom Group
22. **A building drain that conveys sewage only is known as?**
  - A. Building Sewer (Combined)
  - B. Building Drain
  - C. Building Drain (Storm)
  - D. Building Drain (Sanitary)
23. **A room equipped with only a water closet and lavatory is known as a?**
  - A. Bathroom Group
  - B. Water Closet
  - C. Bathroom, Half
  - D. Restroom

24. **A building sewer that conveys both sewage and storm water or other drainage is known as?**
  - A. Building Sewer (Storm)
  - B. Building Sewer (Sanitary)
  - C. Building Sewer (Combined)
  - D. Building Sewer
25. **What best defines a group of two or more similar, adjacent fixtures that discharge into a common horizontal waste or soil branch?**
  - A. Battery of Fixtures
  - B. Bathroom, Half
  - C. Bathroom Group
  - D. Water Closet
26. **An electrical term where a reliable conductor is required to ensure the electrical conductivity between metal parts required to be electrically connected is known as a.**
  - A. Main Bond Jumper
  - B. Grounded Conductor
  - C. Equipment Grounding Conductor
  - D. Bonding Jumper
27. **What best defines a device installed in a drainage system to prevent reverse flow?**
  - A. Backwater Valve
  - B. Backflow Preventer
  - C. Backflow Connection Valve
  - D. Backpressure Backflow Valve
28. **What best defines a building drain that conveys storm water or other drainage, but no sewage?**
  - A. Building Drain (Sanitary)
  - B. Building Drain (Storm)
  - C. Building Drain
  - D. Building Drain (Combined)
29. **What best defines a vent connecting one or more individual vents with a vent stack or stack vent?**
  - A. Branch Vent
  - B. Primary Vent Line
  - C. Vent Branch
  - D. Vent System
30. **An arrangement whereby backflow can occur is defined as?**
  - A. Backflow
  - B. Backflow Connection
  - C. Backpressure Backflow
  - D. Backflow Preventer
31. **What is that part of the lowest piping of a drainage system that receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer beginning 2 feet (610 mm) outside the building wall?**
  - A. Building Drain
  - B. Building Drain (Sanitary)
  - C. Building Drain (Storm).
  - D. Building Sewer (Combined).
32. **What best defines that part of the horizontal piping of a drainage system that extends from the end of the building drain and that receives the discharge of the building drain and conveys it to a public sewer, private sewer, private sewage disposal system, or other point of disposal?**
  - A. Building Sewer (Sanitary)
  - B. Building Sewer (Combined)
  - C. Building Sewer
  - D. Building Sewer (Storm)
33. **A structure built, erected, and framed of component structural parts designed for the housing, shelter, enclosure, or support of persons, animals, or property of any kind is known as a?**
  - A. Single Family Dwelling
  - B. Farm
  - C. Multi Family Dwelling
  - D. Building



**Building Sewer (Storm).** A building sewer that conveys storm water or other drainage, but no sewage.

**Building Subdrain.** That portion of a drainage system that does not drain by gravity into the building sewer.

**Building Supply.** The pipe carrying potable water from the water meter or another source of water supply to a building or other point of use or distribution on the lot.

**Cesspool.** A lined excavation in the ground that receives the discharge of a drainage system or part thereof, so designed as to retain the organic matter and solids discharging therein, but permitting the liquids to seep through the bottom and sides.

**Chemical Waste.** See Special Wastes.

**Clarifier.** See Interceptor (Clarifier).

**Clear Water Waste.** Cooling water and condensate drainage from refrigeration and air-conditioning equipment; cooled condensate from steam heating systems; and cooled boiler blowdown water.

**Clinical Sink.** A fixture that has the same flushing and cleansing characteristics of a water closet that is used to receive the wastes from a bedpan. Also known as a bed pan washer.

**Code.** A standard that is an extensive compilation of provisions covering broad subject matter or that is suitable for adoption into law independently of other codes and standards.

**Combination Thermostatic/Pressure Balancing Valve.** A mixing valve that senses outlet temperature and incoming hot and cold water pressure and compensates for fluctuations in incoming hot and cold water temperatures, pressures, or both to stabilize outlet temperatures.

**Combination Waste and Vent System.** A specially designed system of waste piping embodying the horizontal wet venting of one or more sinks or floor drains using a common waste and vent pipe, adequately sized to provide free movement of air above the flow line of the drain.



### Exam Questions:

34. What best defines a specially designed system of waste piping embodying the horizontal wet venting of one or more sinks or floor drains by means of a common waste and vent pipe, adequately sized to provide free movement of air above the flow line of the drain?
  - A. Combination Waste and Vent System
  - B. Waste and Vent System
  - C. Vent System, Main
  - D. Vent Waste Combination System
35. What is the pipe carrying potable water from the water meter or other source of water supply to a building or other point of use or distribution on the lot?
  - A. Building Main
  - B. Building Supply
  - C. Water Main
  - D. All listed answers

36. **A lined excavation designed as to retain the organic matter and solids discharging therein, but permitting the liquids to seep through the bottom and sides is known as?**
  - A. Culvert
  - B. Drainage ditch
  - C. Cesspool
  - D. Drainage field
37. **What term best defines a bed pan washer?**
  - A. Clinical Sink
  - B. Sanitary sink
  - C. Closet, Portable
  - D. Water less Water Closet, Portable
38. **Where does the UPC direct you to look if you wanted the definition of a clarifier?**
  - A. Clarifiers
  - B. Hydromechanical Interceptors
  - C. Interceptors
  - D. Mechanical Clarifiers
39. **The cooling water and condensate drainage from refrigeration and air-conditioning equipment; cooled condensate from steam heating systems; and cooled boiler blowdown water would best be defined as?**
  - A. Combined Building
  - B. Combination Thermostatic Waste
  - C. Water Waste
  - D. Clear Water Waste
40. **What best defines a standard that is an extensive compilation of provisions covering broad subject matter or that is suitable for adoption into law independently of other codes and standards?**
  - A. Compilation, Code
  - B. Standards
  - C. State Specific Rules and Standards
  - D. Code
41. **A mixing valve that senses outlet temperature and incoming hot and cold water pressure and compensates for fluctuations in incoming hot and cold water temperatures, pressures, or both to stabilize outlet temperatures is known as?**
  - A. Pressure Balancing Valve, Combination
  - B. Combination Pressure Balancing Valve
  - C. Combination Thermostatic/Pressure Balancing Valve
  - D. Combination Valve
42. **What best defines a building sewer that conveys storm water or other drainage, but no sewage.**
  - A. Building Sewer (Combined)
  - B. Building Sewer
  - C. Building Sewer (Storm)
  - D. Building Sewer (Dedicated)
43. **Where does the UPC direct one to look regarding chemical wastes?**
  - A. Detrimental Wastes
  - B. Special Wastes
  - C. Hazardous Wastes
  - D. MSDS
44. **What best defines that portion of a drainage system that does not drain by gravity into the building sewer?**
  - A. Building Subdrain
  - B. Building Sewer
  - C. Building Sewer (Combined)
  - D. Building Sewer (Dedicated)

**Common.** That part of a plumbing system that is so designed and installed as to serve more than one appliance, fixture, building, or system.

**Conductor.** A pipe inside the building that conveys storm water from the roof to a storm drain, combined building sewer, or other approved point of disposal.

**Contamination.** An impairment of the quality of the potable water that creates an actual hazard to the public health through poisoning or through the spread of disease by sewage, industrial fluids, or waste. Also defined as High Hazard.

**Continuous Vent.** A vertical vent that is a continuation of the drain to which it connects.

**Continuous Waste.** A drain connecting the compartments of a set of fixtures to a trap or connecting other permitted fixtures to a common trap.

**WAC 51-56-0205.0 Certified Backflow Assembly Tester.** A person certified by the Washington state department of health under chapter 246-292 WAC to inspect (for correct installation and approval status) and test (for proper operation), maintain and repair (in compliance with chapter 18.106 RCW) backflow prevention assemblies, devices and air gaps.

**CPVC.** Chlorinated Polyvinyl Chloride.

**Critical Care Area.** See Patient Care Space, Category 1.

**Critical Level.** The critical level (C-L or C/L) marking on a backflow prevention device or vacuum breaker is a point conforming to approved standards and established by the testing laboratory (usually stamped on the device by the manufacturer) that determines the minimum elevation above the floodlevel rim of the fixture or receptor served at which the device may be installed. Where a backflow prevention device does not bear a critical level marking, the bottom of the vacuum breaker, combination valve, or the bottom of such approved device shall constitute the critical level.

**Cross-Connection.** A connection or arrangement, physical or otherwise, between a potable water supply system and a plumbing fixture or a tank, receptor, equipment, or device, through which it may be possible for nonpotable, used, unclean, polluted, and contaminated water, or other substances to enter into a part of such potable water system under any condition.

**Debris Excluder.** A device installed on the rainwater catchment conveyance system to prevent the accumulation of leaves, needles, or other debris in the system.

**Department Having Jurisdiction.** The Authority Having Jurisdiction, including any other law enforcement agency affected by a provision of this code, whether such agency is specifically named or not.

**Design Flood Elevation.** The elevation of the "design flood," including wave height, relative to the datum specified on the community's legally designated flood hazard map. In areas designated as Zone AO, the design flood elevation is the elevation of the highest existing grade of the building's perimeter plus the depth number (in feet) specified on the flood hazard map. In areas designated as Zone AO where a depth number is not specified on the map, the depth number is taken as being equal to 2 feet (610 mm).

**Developed Length.** The length along the center line of a pipe and fittings.

**Diameter.** Unless specifically stated, "diameter" is the nominal diameter as designated commercially.



## Exam Questions:

45. **What is considered an impairment of the quality of the potable water that creates an actual hazard to the public health through poisoning or through the spread of disease by sewage, industrial fluids, or waste?**
  - A. Continuous Waste
  - B. Hazard
  - C. High Hazard
  - D. Contamination
46. **What does CPVC stand for?**
  - A. Chlorinate Post (Vinyl Chloride)
  - B. Chlorinated Poly (Vinyl Chloride)
  - C. Chlorinated Porous (Vinyl Chloride)
  - D. Chloride Poly (Vinyl Chlorinate)
47. **That part of a plumbing system that is so designed and installed as to serve more than one appliance, fixture, building, or system is known as?**
  - A. System, Main
  - B. Combined
  - C. Common
  - D. Multiple
48. **What best defines the minimum elevation above the floodlevel rim of the fixture or receptor served at which the device may be installed?**
  - A. Emergency Room
  - B. Critical Care Area
  - C. Critical Care Level
  - D. Critical Level
49. **What is considered a drain connecting the compartments of a set of fixtures to a trap or connecting other permitted fixtures to a common trap?**
  - A. Continuous Waste
  - B. Continuous Drain
  - C. Commercial Drain
  - D. Combined Drain
50. **Would it be considered Acceptable or a Violation of this code to cross connect a fixture tank to the potable water system?**
  - A. Violation
  - B. Acceptable
51. **A vertical vent that is a continuation of the drain to which it connects is best defined as?**
  - A. Combined Vent
  - B. Continuous Vent
  - C. Conductor
  - D. Continuous Waste Vent
52. **What best defines a device installed on the rainwater catchment conveyance system to prevent the accumulation of leaves, needles, or other debris in the system?**
  - A. Excluder
  - B. Shredder
  - C. Debris Excluder
  - D. Debris Mulcher
53. **What best defines a pipe inside the building that conveys storm water from the roof to a storm drain, combined building sewer, or other approved point of disposal?**
  - A. Conductor
  - B. Storm Drain
  - C. Waste Pipe, Storm
  - D. Combined Sewer System
54. **The Authority Having Jurisdiction, including any other law enforcement agency affected by a provision of this code, whether such agency is specifically named or not is defined as?**
  - A. Chief Plumbing Inspector
  - B. Authority Having Jurisdiction
  - C. Plumbing Inspector
  - D. Department Having Jurisdiction
55. **Patient Care space meets the definition of what listed term?**
  - A. Emergency Room
  - B. Critical Care Level
  - C. Critical Care Area
  - D. Critical Level (C/L)

56. What does the UPC define as the length along the center line of a pipe and fittings?

- A. Adjacent
- B. Total Length
- C. Center to Center
- D. Developed Length

57. What zone designator is for areas where the design flood elevation is the elevation of the highest existing grade of the building's perimeter plus the depth number in feet as listed on the flood hazard map?

- A. C/L
- B. A
- C. O
- D. AO

**Downspout.** The rain leader from the roof to the building storm drain, combined building sewer, or other means of disposal located outside of the building. See Conductor and Leader.

**Drain.** A pipe that carries waste or waterborne wastes in a building drainage system.

**Drainage System.** Includes all the piping within public or private premises that conveys sewage, storm water, or other liquid wastes to a legal point of disposal, but does not include the mains of a public sewer system or a public sewage treatment or disposal plant.

**Durham System.** Soil or waste system in which all piping is threaded pipe, tubing, or other such rigid construction, using recessed drainage fittings to correspond to the types of piping.

**Domestic Sewage.** The liquid and water-borne wastes derived from the ordinary living processes, free from industrial wastes, and of such character as to permit satisfactory disposal, without special treatment, into the public sewer or by means of a private sewage disposal system.

**Effective Ground-Fault Current Path.** An intentionally constructed, low-impedance electrically conductive path designed and intended to carry current under ground-fault conditions from the point of a ground fault on a wiring system to the electrical supply source and that facilitates the operation of the overcurrent protective device or ground-fault detectors on high-impedance grounded systems.

**Effective Opening.** The minimum cross-sectional area at the point of water supply discharge measured or expressed in terms of: (1) diameter of a circle or (2) where the opening is not circular, the diameter of a circle of equivalent cross-sectional area. (This is applicable also to air gap.)

**Essentially Nontoxic Transfer Fluid.** Essentially nontoxic at practically nontoxic, Toxicity Rating Class 1 (reference "Clinical Toxicology of Commercial Products" by Gosselin, Smith, Hodge, & Braddock).

**Existing Work.** A plumbing system or any part thereof that has been installed prior to the effective date of this code.

**F Rating.** The time period that the penetration firestop system limits the spread of fire through the penetration, where tested in accordance with ASTM E 814 or UL 1479.

**Fixture Branch.** A water supply pipe between the fixture supply pipe and the water distribution pipe.

**Fixture Drain.** The drain from the trap of a fixture to the junction of that drain with any other drain pipe.





**Fixture Supply.** A water supply pipe connecting the fixture with the fixture branch.

**Fixture Unit.** A quantity in terms of which the load-producing effects on the plumbing system of different kinds of plumbing fixtures are expressed on some arbitrarily chosen scale.

### Exam Questions:

58. What listed term does not include the mains of a public sewer system or a public sewage treatment or disposal plant?  
A) Drainage System  
B) Durham System  
C) Downspout  
D) Drain
59. What is a pipe that carries waste or waterborne wastes in a building drainage system?  
A) Durham System  
B) Downspout  
C) Drain  
D) Drainage System
60. What do we call an intentional low-impedance electrically conductive path intended to carry current under ground-fault conditions from the point of a ground fault on a wiring system back to the source?  
A) Effective Ground-Fault Current Path  
B) Ground-Fault Current Path  
C) Equipment grounding Conductor  
D) Tracer Wire
61. What is the rain leader from the roof to the building storm drain, combined building sewer, or other means of disposal located outside of the building known as?  
A) Drain  
B) Downspout  
C) Durham System  
D) Drainage System
62. What is known as a plumbing system or any part thereof that has been installed prior to the effective date of this code?  
A) Existing Installation  
B) Grandfathered  
C) Existing Work  
D) All listed answers
63. The essentially nontoxic at practically nontoxic, Toxicity Rating Class 1 (reference "Clinical Toxicology of Commercial Products" by Gosselin, Smith, Hodge, & Braddock) is defined by this code as?  
A) Equivalency Fluid  
B) Nontoxic Fluid  
C) Equivalency Transfer Fluid  
D) Essentially Nontoxic Transfer Fluid
64. What best defines a quantity in terms of which the load-producing effects on the plumbing system of different kinds of plumbing fixtures are expressed on some arbitrarily chosen scale?  
A) Fixture Unit  
B) Flush Unit  
C) Branch Unit  
D) Arbitrary Unit
65. A soil or waste system in which all piping is threaded pipe, tubing, or other such rigid construction, using recessed drainage fittings to correspond to the types of piping, would best be defined as?  
A) Durham System  
B) Drainage System  
C) Downspout  
D) Domestic Sewage

66. What is best defined as the time period that a penetration firestop system will limit the spread of fire through the penetration?
- A) UL Number
  - B) F Rating
  - C) UL Installation assembly
  - D) F Installation assembly
67. What is the water supply pipe connecting the fixture with the fixture branch known as?
- A) Supply Fixture
  - B) Fixture Supply
  - C) Fixture Branch
  - D) Branch Supply
68. What best defines the liquid and water-borne wastes derived from the ordinary living processes, free from industrial wastes, and of such character as to permit satisfactory disposal, without special treatment, into the public sewer or by means of a private sewage disposal system?
- A) Residential sewage system
  - B) Brown Water
  - C) Sewage
  - D) Domestic Sewage
69. What best defines the drain from the trap of a fixture to the junction of that drain with any other drain pipe?
- A) Fixture Drain
  - B) Fixture Trap
  - C) Fixture Junction
  - D) Drain Junction
70. What best defines the minimum cross-sectional area at the point of water supply discharge measured or expressed in terms of: (1) diameter of a circle or (2) where the opening is not circular, the diameter of a circle of equivalent cross-sectional area?
- A) Effective Opening
  - B) Air Gap
  - C) Cross Section
  - D) Equivalency
71. The water supply pipe between the fixture supply pipe and the water distribution pipe is known as the?
- A) Fixture Supply
  - B) Fixture Branch
  - C) Branch Supply
  - D) Supply Fixture

**Flood Hazard Area.** The greater of the following two areas:

- (1) The area within a floodplain subject to a 1 percent or greater chance of flooding in any given year.
- (2) The area designated as a flood hazard area on a community's flood hazard map, or otherwise legally designated.

**Flammable Vapor or Fumes.** The concentration of flammable constituents in the air that exceeds 25 percent of its lower flammability limit (LFL).

**Flood Level.** See Flooded.

**Flood-Level Rim.** The top edge of a receptor from which water overflows.

**Flooded.** A fixture is flooded where the liquid therein rises to the flood-level rim.

**Flush Tank.** A tank located above or integral with water closets, urinals, or similar fixtures for the purpose of flushing the usable portion of the fixture.

**Flush Valve.** A valve located at the bottom of a tank for flushing water closets and similar fixtures.



**Flushometer Tank.** A tank integrated within an air accumulator vessel that is designed to discharge a predetermined quantity of water to fixtures for flushing purposes.

**Flushometer Valve.** A valve that discharges a predetermined quantity of water to fixtures for flushing purposes and is actuated by direct water pressure.

**FOG Disposal System.** A grease interceptor that reduces nonpetroleum fats, oils, and grease (FOG) in effluent by separation, mass, and volume reduction.

**Gang or Group Shower.** Two or more showers in a common area.

### Exam Questions:

72. The area within a floodplain subject to a 1 percent or greater chance of flooding in any given year falls under the broader definition of?
  - A. Flood Level
  - B. Flood Hazard Area
  - C. Flood-Level Rim
  - D. High-Velocity Flood Hazard Area
73. What listed definition would satisfy the definition of Flood level?
  - A. Flood Level Zone
  - B. Flooded
  - C. Flood-Level Rim
  - D. Flood Plain
74. What best defines a grease interceptor that reduces nonpetroleum fats, oils, and grease in effluent by separation, mass, and volume reduction?
  - A. Grease Interceptor
  - B. Grease Trap
  - C. FOG Disposal System
  - D. Volume Reduction Device
75. What is known as the top edge of a receptor from which water overflows?
  - A. Flood Level Zone
  - B. Flooded
  - C. Flood-Level Rim
  - D. Flood Plain
76. When two or more showers are in a common area, this is known as a (an)?
  - A. All listed answers
  - B. Gang or Group Shower
  - C. Gang Shower
  - D. Group Shower
77. A tank located above or integral with water closets, urinals, or similar fixtures for the purpose of flushing the usable portion of the fixture is known as a?
  - A. Flush Valve tank
  - B. Flush Tank
  - C. Flushometer Tank
  - D. Tank
78. What best defines a tank integrated within an air accumulator vessel that is designed to discharge a predetermined quantity of water to fixtures for flushing purposes?
  - A. Flush Collar Tank
  - B. Flush Valve tank
  - C. Flushometer Tank
  - D. Tank Valve
79. A fixture is considered \_\_\_\_\_ when the liquid therein rises to the flood-level rim.
  - A. Maxed
  - B. Flooded
  - C. Plugged
  - D. Non Functional



80. A valve that discharges a predetermined quantity of water to fixtures for flushing purposes and is actuated by direct water pressure is known as a?
- A. Flushometer Valve
  - B. Flush Valve
  - C. Flush Tank Valve
  - D. Tank Valve
81. What do you call a valve located at the bottom of a tank for the purpose of flushing water closets?
- A. Flush Tank Valve
  - B. Flush Valve
  - C. Flushometer Tank Valve
  - D. Tank Valve
82. At what percentage does the concentration of flammable constituents in the air exceed a materials lower flammability limit?
- A. 15
  - B. 20
  - C. 25
  - D. 10

**Gas Piping System.** An arrangement of gas piping or regulators after the point of delivery and each arrangement of gas piping serving a building, structure, or premises, whether individually metered or not.

**Grade.** The slope or fall of a line of pipe in reference to a horizontal plane. In drainage, it is usually expressed as the fall in a fraction of an inch (mm) or percentage slope per foot (meter) length of pipe.

**Gravity Grease Interceptor.** A plumbing appurtenance or appliance that is installed in a sanitary drainage system to intercept nonpetroleum fats, oils, and greases (FOG) from a wastewater discharge and is identified by volume, 30 minute retention time, baffle(s), not less than two compartments, a total volume of not less than 300 gallons (1135 L), and gravity separation. [These interceptors comply with the requirements of Chapter 10 or are designed by a registered design professional.] Gravity grease interceptors are generally installed outside.

**Gray Water.** Untreated wastewater that has not come into contact with toilet waste, kitchen sink waste, dishwasher waste or similarly contaminated sources. Gray water includes wastewater from bathtubs, showers, lavatories, clothes washers, and laundry tubs. Also known as grey water, graywater, and greywater.

**Gray Water Diverter Valve.** A valve that directs gray water to the sanitary drainage system or to a subsurface irrigation system.

**Grease Interceptor.** A plumbing appurtenance or appliance that is installed in a sanitary drainage system to intercept nonpetroleum fats, oil, and greases (FOG) from a wastewater discharge.

**Grease Removal Device (GRD).** A hydromechanical grease interceptor that automatically, mechanically removes non-petroleum fats, oils and grease (FOG) from the interceptor, the control of which are either automatic or manually initiated.

**Grounding Electrode.** A conducting object through which a direct connection to the earth is established.



**Hangers.** See Supports.

**Heat-Fusion Weld Joints.** A joint used in some thermoplastic systems to connect the pipe to fittings or pipe lengths directly to one another (butt-fusion). This method of joining pipe to fittings includes socket-fusion, electro-fusion, and saddle-fusion. This method of welding involves the application of heat and pressure to the components, allowing them to fuse together forming a bond between the pipe and fitting.

**High Hazard.** See Contamination.

**Horizontal Branch.** A drain pipe extending laterally from a soil or waste stack or building drain with or without vertical sections or branches, which receives the discharge from one or more fixture drains and conducts it to the soil or waste stack or to the building drain.

**Horizontal Pipe.** A pipe or fitting that is installed in a horizontal position or which makes an angle of less than 45 degrees (0.79 rad) with the horizontal.

**WAC 51-56-210.0 Hot Water.** Water at a temperature exceeding or equal to 100°F.

**Hydromechanical Grease Interceptor.** A plumbing appurtenance or appliance that is installed in a sanitary drainage system to intercept nonpetroleum fats, oil, and grease (FOG) from a wastewater discharge and is identified by flow rate, and separation and retention efficiency. The design incorporates air entrainment, hydromechanical separation, interior baffling, or barriers in combination or separately, and one of the following:

- (1) External flow control, with air intake (vent), directly connected.
- (2) External flow control, without air intake (vent), directly connected.
- (3) Without external flow control, directly connected.
- (4) Without external flow control, indirectly connected.

These interceptors comply with the requirements of Table 1014.2.1. Hydromechanical grease interceptors are generally installed inside.



## Exam Questions:

83. A gravity Grease Interceptor is normally installed \_\_\_\_\_.

- A. In Full view of the drainage system
- B. Inside
- C. In a confined area
- D. Outside

84. A Hydromechanical Grease Interceptor is normally installed \_\_\_\_\_.

- A. Outside
- B. Inside
- C. In a confined area
- D. In Full view of the drainage system

85. Where are you directed to look by the UPC to find the definition for Hangers?

- A. Supports
- B. Support Systems
- C. Hanging Systems
- D. Methods, Vertical systems

86. The definition of "High Hazard" can be referenced by looking at what listed definition?

- A. Hazards
- B. Contamination
- C. Requirements, Potable Water
- D. Water treatment

87. A plumbing appurtenance that is installed in a sanitary drainage system to intercept nonpetroleum fats from a wastewater discharge is best defined as a?
- A. Grease Removal Device
  - B. Grease Interceptor
  - C. Gravity Grease Interceptor
  - D. Fuel Gas Removal System
88. A drain pipe extending laterally from a building drain with or without vertical sections which receives the discharge from one or more fixture drains to the building drain is known as?
- A. Horizontal Drain
  - B. Horizontal Pipe
  - C. Horizontal Branch
  - D. Building Drain
89. A hydromechanical grease interceptor can be operated \_\_\_\_\_.
- A. Remotely
  - B. Automatically
  - C. Manually
  - D. All Listed Answers
90. What is commonly referred to as a joint used in some thermoplastic systems to connect pipe to fittings or pipe lengths directly to one another?
- A. Chemical-Fusion Weld Joints
  - B. Cold-Fusion Weld Joints
  - C. Heat-Fusion Weld Joints
  - D. Cold-Chemical Weld Joints
91. What best defines the slope or fall of a line of pipe as related to a horizontal plane?
- A. Slope Line
  - B. Grade
  - C. Fall Angle
  - D. Incline
92. A Horizontal Pipe makes an angle of less than \_\_\_\_\_ degrees with the horizontal.
- A. 50
  - B. 60
  - C. 45
  - D. 90
93. What is known as a device that establishes an electrical connection to the earth?
- A. Service Bond
  - B. Ground Rod
  - C. Grounding electrode conductor
  - D. Grounding Electrode
94. What is an arrangement of gas piping or regulators after the point of delivery and each arrangement of gas piping serving a building, structure, or premises, whether individually metered or not?
- A. Gas piping combo system
  - B. Gas piping system
  - C. Gas piping rack
  - D. Gas piping
95. Wastewater from bathtubs, showers, lavatories, clothes washers, and laundry tubs is known as?
- A. Wastewater discharge
  - B. Brown Water
  - C. Gray Water
  - D. Non Treated Water
96. At what temperature is water considered hot in the state of Washington?
- A. 100°F
  - B. 120°F
  - C. 43°C
  - D. 90°F

**Indirect-Fired Water Heater.** A water heater consisting of a storage tank equipped with an internal or external heat exchanger used to transfer heat from an external source to heat potable water. The storage tank either contains heated potable water or water supplied from an external source, such as a boiler.

**Indirect Waste Pipe.** A pipe that does not connect directly to the drainage system but conveys liquid wastes by discharging into a plumbing fixture, interceptor, or receptacle that is directly connected to the drainage system.

**Individual Vent.** A pipe installed to vent a fixture trap, and that connects with the vent system above the fixture served or terminates in the open air.

**Industrial Waste.** Liquid or water-borne waste from industrial or commercial processes, except domestic sewage.

**Interceptor (Clarifier).** A device designed and installed so as to separate and retain deleterious, hazardous, or undesirable matter from normal wastes and permit normal sewage or liquid wastes to discharge into the disposal terminal by gravity.

**Invert.** The lowest portion of the inside of a horizontal pipe.

**Joint, Brazed.** A joint obtained by joining of metal parts with alloys that melt at temperatures exceeding 840°F (449°C), but less than the melting temperature of the parts to be joined.

**Joint, Soldered.** A joint obtained by the joining of metal parts with metallic mixtures or alloys that melt at a temperature up to and including 840°F (449°C).

**Joint, Welded.** A gastight joint obtained by the joining of metal parts in the plastic molten state.



### Exam Questions:

97. What best defines Liquid or water-borne waste from industrial or commercial processes, except domestic sewage?
  - A. Industrial waste
  - B. Chemical wastes
  - C. Corrosive wastes
  - D. Domestic sewage
98. What is the lowest portion of the inside of a horizontal pipe called?
  - A. Inside Low Point
  - B. Deep Well
  - C. Bottom
  - D. Invert
99. Also known as a pipe that does not connect directly with the drainage system but conveys liquid wastes by discharging into a plumbing fixture, interceptor, or receptacle that is directly connected to the drainage system would best meet the definition of?
  - A. Storm Water Pipe
  - B. Indirect Waste Pipe
  - C. Sewer Waste Pipe
  - D. Individual Waste Pipe
100. What is the process of obtaining a gastight joint by the joining of metal parts in the plastic molten state?
  - A. Joint, Fusion
  - B. Joint, Welded
  - C. Joint, Brazed
  - D. Joint, Soldered

101. What is not included with regards to industrial waste?

- A. Treated sewage
- B. Chemical Wastes
- C. Corrosive Wastes
- D. Domestic sewage

102. What is the process of joining metal parts with alloys that melt at temperatures exceeding 840°F known as?

- A. Joint, Brazed
- B. Joint, Welded
- C. Joint, Soldered
- D. Joint, Fusion

103. What best defines a device designed to separate and retain deleterious, hazardous, or undesirable matter from normal wastes and also permits normal sewage or liquid wastes to discharge into the disposal terminal by gravity?

- A. Back flow Preventer
- B. Indirect Waste Pipe Ionizer
- C. Interceptor (Clarifier)
- D. Receptor

**Labeled.** Equipment or materials bearing a label of a listing agency (accredited conformity assessment body). See Listed (third-party certified).

**Lavatories in Sets.** Two or three lavatories that are served by one trap.

**Leader.** An exterior vertical drainage pipe for conveying storm water from roof or gutter drains. See Downspout.

**Liquid Waste.** The discharge from a fixture, appliance, or appurtenance in connection with a plumbing system that does not receive fecal matter.

**Listed (Third-party certified).** Equipment or materials included in a list published by a listing agency (accredited conformity assessment body) that maintains periodic inspection on current production of listed equipment or materials and whose listing states either that the equipment or material complies with approved standards or has been tested and found suitable for use in a specified manner.

**Lot.** A single or individual parcel or area of land legally recorded or validated by other means acceptable to the Authority Having Jurisdiction on which is situated a building or which is the site of any work regulated by this code, together with the yards, courts, and unoccupied spaces legally required for the building or works, and that is owned by or is in the lawful possession of the owner of the building or works.

**Macerating Toilet System.** A system comprised of a sump with macerating pump and with connections for a water closet and other plumbing fixtures, which is designed to accept, grind, and pump wastes to an approved point of discharge.

**Main.** The principal artery of a system of continuous piping to which branches may be connected.

**Main Sewer.** See public sewers.

**Main Vent.** The principal artery of the venting system to which vent branches may be connected.

**Medical Air.** Air that is supplied from cylinders, bulk containers, medical air compressors, or has been reconstituted from oxygen USP and oilfree, dry nitrogen.

**Medical Gas.** Gas used in a medical facility, including oxygen, nitrous oxide, carbon dioxide, helium, medical air, and mixtures of these gases. Standards of purity apply.





**Medical Gas Manifold.** A device for connecting outlets of one or more gas cylinders to the central piping system for that specific gas.

**Medical Gas System.** An assembly of equipment and piping for the distribution of nonflammable medical gases such as oxygen, nitrous oxide, compressor air, carbon dioxide, and helium.

**Medical Surgical Vacuum.** A method used to provide a source of drainage, aspiration, and suction in order to remove body fluids from patients.

**Mobile Home Park Sewer.** That part of the horizontal piping of a drainage system that begins 2 feet (610 mm) downstream from the last mobile home site and conveys it to a public sewer, private sewer, private sewage disposal system, or other point of disposal.

**WAC 51-56-218.0 Plumbing System.** Includes all potable water, building supply and distribution pipes, all reclaimed water systems, all plumbing fixtures and traps, all drainage and vent pipe(s), and all building drains including their respective joints and connection, devices, receptors, and appurtenances within the property lines of the premises and shall include potable water piping, potable water treating or using equipment, medical gas and medical vacuum systems, and water heaters: Provided, That no certification shall be required for the installation of a plumbing system within the property lines and outside a building.



### Exam Questions:

104. Equipment or materials bearing a label of a listing agency is known as?

- A. Rated
- B. Listed
- C. Labeled
- D. Identified

105. The practice of having two or three lavatories that are served by one trap is known as?

- A. Leadering
- B. Lavatories in Sets
- C. Single Set
- D. Lavatory Rough

106. What best defines an exterior vertical drainage pipe that directs storm water from gutter drains?

- A. Leader
- B. Gutter Spout
- C. Downspout
- D. Both A and C

107. What best defines the discharge from a fixture, appliance, or appurtenance in connection with a plumbing system that does not receive fecal matter?

- A. Brown Water
- B. Liquid Waste
- C. Storm Water
- D. Gray Water

108. This definition relates to equipment or materials included in a list published by a listing agency that maintains periodic inspection on current production of listed equipment.

- A. Listed (Third-party certified)
- B. UL Laboratories
- C. Consumer Reports
- D. Listing Agency

109. A single area of land legally recorded as being owned where any work may be done is regulated by this code and would best be defined as a (an)?
- Plot
  - Lot
  - Parcel
  - Property
110. How far from the last mobile home site is the mobile home park sewer considered to begin?
- 2 feet
  - 3 feet
  - 48 inches
  - 72 inches
111. What device should be used with medical gas for connecting outlets of one or more gas cylinders to the central piping system for that specific gas?
- Medical Gas Vacuum Manifold
  - Medical Gas Regulator
  - Metered Regulator
  - Medical Gas Manifold
112. What is known as a system comprised of a sump with a macerating pump and connections for a water closet including other plumbing fixtures which is designed to accept, grind, and pump wastes to an approved point of discharge?
- Macerating Toilet System
  - Mobile Home Park Sewer
  - Medical Waste Vacuum System
  - Compost Toilet System
113. True or False? A medical vacuum system is not considered part of a plumbing system.
- True
  - False
114. What is commonly referred to as the principal artery of the venting system to which vent branches may be connected?
- Horizontal Vent
  - Main Vent
  - Vertical Main Vent Branch
  - Vertical Main
115. What term best defines a method used to provide a source of aspiration for patients?
- Medical Gas Manifold vacuum system
  - Medical Gas system, Vacuum
  - Medical Surgical Vacuum
  - Medical Support Gas system
116. What best defines the principal artery of a system of continuous piping to which branches may be connected?
- Main Line
  - Main Sewer
  - Main Branch
  - Main
117. What is the maximum amount of gaseous hydrocarbons that medical air can contain?
- 24 ppm
  - 25 ppm
  - 30 ppm
  - 50 ppm

**Offset.** A combination of elbows or bends in a line of piping that brings one section of the pipe out of line but into a line parallel with the other section.

**On-Site Treated Nonpotable Water.** Nonpotable water, including gray water that has been collected, treated, and intended to be used on-site and is suitable for direct beneficial use.

**Plumbing Vent.** A pipe provided to ventilate a plumbing system, to prevent trap siphonage and backpressure, or to equalize the air pressure within the drainage system.



**Potable Water.** Water that is satisfactory for drinking, culinary, and domestic purposes and that meets the requirements of the Health Authority Having Jurisdiction.

**PP.** Polypropylene.

**Pressure.** The normal force exerted by a homogeneous liquid or gas, per unit of area, on the wall of the container.

**Residual Pressure.** The pressure available at the fixture or water outlet after allowance is made for pressure drop due to friction loss, head, meter, and other losses in the system during maximum demand periods.

**Static Pressure.** The pressure existing without any flow.

**Pressure-Balancing Valve.** A mixing valve that senses incoming hot and cold water pressures and compensates for fluctuations in either to stabilize outlet temperature.

**Push Fit Fitting.** A mechanical fitting where the connection is assembled by pushing the tube or pipe into the fitting and is sealed with an “O” ring.

**Quick-Disconnect Device.** A hand-operated device that provides a means for connecting and disconnecting a hose to a water supply and that is equipped with a means to shut off the water supply where the device is disconnected.

**Receptor.** An approved plumbing fixture or device of such material, shape, and capacity as to adequately receive the discharge from indirect waste pipes, so constructed and located as to be readily cleaned.

**Roof Washer.** A device or method for removal of sediment and debris from a collection surface by diverting initial rainfall from entry into the cistern(s). Also known as a first flush device.

**Riser.** A water supply pipe that extends vertically one full story or more to convey water to branches or fixtures.

**SDR.** An abbreviation for “standard dimensional ratio,” which is the specific ratio of the average specified outside diameter to the minimum wall thickness for outside controlled diameter plastic pipe.

**Seepage Pit.** A lined excavation in the ground which receives the discharge of a septic tank so designed as to permit the effluent from the septic tank to seep through its bottom and sides.

**Sewage Ejector.** A device for lifting sewage by entraining it on a high-velocity jet stream, air, or water.

**Sewage Pump.** A permanently installed mechanical device, other than an ejector, for removing sewage or liquid waste from a sump.

**WAC 51-56-225 Spray Sprinkler Body.** The exterior case or shell of a sprinkler incorporating a means of connection to the piping system designed to convey water to a nozzle or orifice.

**WAC 51-56-225.0 Water Heater (consumer electric storage).**

A consumer product that uses electricity as the energy source to heat domestic potable water, has a nameplate input rating of twelve kilowatts or less, contains nominally forty gallons but no more than one hundred twenty gallons of rated hot water storage volume, and supplies a maximum hot water delivery temperature less than one hundred eighty degrees Fahrenheit.

**WAC 51-56-225.0 Water Heater (mini-tank electric).** A small electric water heater that has a measured storage volume of more than one gallon and a rated storage volume of less than twenty gallons.

**WAC 51-56-225.0 Water/Wastewater Utility.** A public or private entity, including a water purveyor as defined in chapter 246-290 WAC, which may treat, deliver, or do both functions to reclaimed (recycled) water, potable water, or both to wholesale or retail customers.





## Exam Questions:

118. What best defines the pipe provided to ventilate a plumbing system that prevents trap siphonage and backpressure?
- A. Plumbing Vent System
  - B. Plumbing Vent
  - C. Horizontal Vent
  - D. Main Vent
119. What is the normal force exerted by a homogeneous liquid or gas, per unit of area, on the wall of the container?
- A. Hydraulic expansion
  - B. Force
  - C. Atmosphere
  - D. Pressure
120. How does this code identify polypropylene?
- A. PY
  - B. PP
  - C. PC
  - D. H7
121. In a plumbing system, what is known as the pressure existing without any flow?
- A. Head Pressure
  - B. Residual Pressure
  - C. Static Pressure
  - D. Atmospheric Pressure
122. A permanently installed mechanical device that removes sewage or liquid waste from a sump is known as a?
- A. Sewage Pump
  - B. Septic Tank
  - C. Seepage Tank
  - D. Sewage Ejector
123. What best defines a mixing valve that senses incoming hot and cold water pressures and compensates for fluctuations?
- A. Transducer Valve
  - B. Hydro mechanical Valve
  - C. Butterfly Valve
  - D. Pressure-Balancing Valve
124. What best defines a device for lifting sewage by entraining it on a high-velocity jet stream, air, or water?
- A. Seepage Pit
  - B. Septic Tank
  - C. Seepage Tank
  - D. Sewage Ejector
125. A receptor is required to be located in such a way that it is \_\_\_\_\_.
- A. No Special Requirement
  - B. Readily Accessible
  - C. Accessible
  - D. Readily cleaned
126. A \_\_\_\_\_ is a mechanical fitting where the connection is assembled by pushing the tube or pipe into the fitting and is sealed with an "O" ring.
- A. Tapered Fitting
  - B. Push Fit Fitting
  - C. Pressed Fitting
  - D. Push Lock
127. The standard dimensional ratio listed in the UPC refers to what type of pipe?
- A. Plastic
  - B. Galvanized
  - C. Copper
  - D. RCT-Resin
128. What is the pressure available at a fixture after allowance is made for pressure drop in a system during maximum demand periods?
- A. Residual Pressure
  - B. Static Pressure
  - C. Atmospheric Pressure
  - D. Head Pressure
129. A hand-operated device that provides a means for connecting and disconnecting a hose to a water supply that can shut off the water supply where the device is disconnected is referred to as a?
- A. Spigot
  - B. Shut off Valve
  - C. Quick-Disconnect Device
  - D. Hose Connector

- 130. A “first flush device” is defined by the UPC as a?**
- A. Roof Drain
  - B. Roof Washer
  - C. Remote Outlet
  - D. Regulating Equipment
- 131. What is the water that is satisfactory for drinking, culinary, and domestic purposes?**
- A. Potable Water
  - B. On-Site Treated Nonpotable Water
  - C. Brown Water
  - D. Gray Water
- 132. What does the UPC define as lined excavation in the ground which receives the discharge of a septic tank?**
- A. Septic Tank
  - B. Seepage Pit
  - C. Seepage Tank
  - D. Sewage Ejector
- 133. A combination of elbows or bends in a line of piping that brings one section of the pipe out of line but into a line parallel with the other section is known as a (an)?**
- A. Rack System
  - B. Saddle
  - C. Offset
  - D. Paralleling
- 134. What best defines a water supply pipe that extends vertically one full story or more to convey water to branches or fixtures?**
- A. Vertical Main
  - B. Main
  - C. Riser
  - D. Receptor
- 135. Gray water that has been collected on-site and treated that is intended to be used and suitable for direct beneficial use best defines what listed term?**
- A. A “Honey Bucket” holding tank
  - B. Off-Site Treated potable Water
  - C. On-Site Nonpotable Water
  - D. On-Site Treated Nonpotable Water
- 136. In what WAC chapter can the description of a water purveyor be located?**
- A. 246-190
  - B. 246-029
  - C. 246-902
  - D. 246-290
- 137. What best defines the exterior case or shell of a sprinkler incorporating a means of connection to the piping system designed to convey water to a nozzle or orifice?**
- A. Sprinkler fitting
  - B. Spray Sprinkler Body
  - C. Sprinkler connector
  - D. Sprinkler coupling
- 138. What is a consumer product that uses electricity as the energy source to heat domestic potable water, has a nameplate input rating of twelve kilowatts or less, contains nominally forty gallons but no more than one hundred twenty gallons of rated hot water storage volume, and supplies a maximum hot water delivery temperature less than one hundred eighty degrees Fahrenheit?**
- A. Water Heater on demand
  - B. Water heater (consumer electric storage)
  - C. Water storage
  - D. Water Heater (tankless)
- 139. What best defines a small electric water heater that has a measured storage volume of more than one gallon and a rated storage volume of less than twenty gallons.?**
- A. Water Heater (mini-tank electric)
  - B. Water heater (consumer electric storage)
  - C. Water storage
  - D. Water Heater (tankless)
- 140. \_\_\_\_\_ is a public or private entity, including a water purveyor as defined in chapter 246-290 WAC, which may treat, deliver, or do both functions to reclaimed (recycled) water, potable water, or both to wholesale or retail customers.**
- A. Water Heater (mini-tank electric)
  - B. Water heater (consumer electric storage)
  - C. Water/Wastewater Utility
  - D. Water Heater (tankless)