

ANSWER SHEET • Oregon: UPC Definitions • Course No. 5000213V

First Name: _____ Last Name: _____ Date: _____

Address: _____ City: _____ State: _____ ZIP: _____

License #: _____ Phone: _____ Email: _____

INSTRUCTIONS TO SUBMIT EXAM

Option 1:



1. Pay online at pay.apiceu.com/OR (or scan QR code)
2. Email your answer sheet(s) to 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. Ⓐ Ⓑ Ⓒ Ⓓ 2. Ⓐ Ⓑ Ⓒ Ⓓ 3. Ⓐ Ⓑ Ⓒ Ⓓ 4. Ⓐ Ⓑ Ⓒ Ⓓ 5. Ⓐ Ⓑ Ⓒ Ⓓ 6. Ⓐ Ⓑ Ⓒ Ⓓ 7. Ⓐ Ⓑ Ⓒ Ⓓ 8. Ⓐ Ⓑ Ⓒ Ⓓ 9. Ⓐ Ⓑ Ⓒ Ⓓ 10. Ⓐ Ⓑ Ⓒ Ⓓ 11. Ⓐ Ⓑ Ⓒ Ⓓ 12. Ⓐ Ⓑ Ⓒ Ⓓ 13. Ⓐ Ⓑ Ⓒ Ⓓ 14. Ⓐ Ⓑ Ⓒ Ⓓ 15. Ⓐ Ⓑ Ⓒ Ⓓ 16. Ⓐ Ⓑ Ⓒ Ⓓ 17. Ⓐ Ⓑ Ⓒ Ⓓ 18. Ⓐ Ⓑ Ⓒ Ⓓ 19. Ⓐ Ⓑ Ⓒ Ⓓ 20. Ⓐ Ⓑ Ⓒ Ⓓ | 21. Ⓐ Ⓑ Ⓒ Ⓓ 22. Ⓐ Ⓑ Ⓒ Ⓓ 23. Ⓐ Ⓑ Ⓒ Ⓓ 24. Ⓐ Ⓑ Ⓒ Ⓓ 25. Ⓐ Ⓑ Ⓒ Ⓓ 26. Ⓐ Ⓑ Ⓒ Ⓓ 27. Ⓐ Ⓑ Ⓒ Ⓓ 28. Ⓐ Ⓑ Ⓒ Ⓓ 29. Ⓐ Ⓑ Ⓒ Ⓓ 30. Ⓐ Ⓑ Ⓒ Ⓓ 31. Ⓐ Ⓑ Ⓒ Ⓓ 32. Ⓐ Ⓑ Ⓒ Ⓓ 33. Ⓐ Ⓑ Ⓒ Ⓓ 34. Ⓐ Ⓑ Ⓒ Ⓓ 35. Ⓐ Ⓑ Ⓒ Ⓓ 36. Ⓐ Ⓑ Ⓒ Ⓓ 37. Ⓐ Ⓑ Ⓒ Ⓓ 38. Ⓐ Ⓑ Ⓒ Ⓓ 39. Ⓐ Ⓑ Ⓒ Ⓓ 40. Ⓐ Ⓑ Ⓒ Ⓓ | 41. Ⓐ Ⓑ Ⓒ Ⓓ 42. Ⓐ Ⓑ Ⓒ Ⓓ 43. Ⓐ Ⓑ Ⓒ Ⓓ 44. Ⓐ Ⓑ Ⓒ Ⓓ 45. Ⓐ Ⓑ Ⓒ Ⓓ 46. Ⓐ Ⓑ Ⓒ Ⓓ 47. Ⓐ Ⓑ Ⓒ Ⓓ 48. Ⓐ Ⓑ Ⓒ Ⓓ 49. Ⓐ Ⓑ Ⓒ Ⓓ 50. Ⓐ Ⓑ Ⓒ Ⓓ 51. Ⓐ Ⓑ Ⓒ Ⓓ 52. Ⓐ Ⓑ Ⓒ Ⓓ 53. Ⓐ Ⓑ Ⓒ Ⓓ 54. Ⓐ Ⓑ Ⓒ Ⓓ 55. Ⓐ Ⓑ Ⓒ Ⓓ 56. Ⓐ Ⓑ Ⓒ Ⓓ 57. Ⓐ Ⓑ Ⓒ Ⓓ 58. Ⓐ Ⓑ Ⓒ Ⓓ 59. Ⓐ Ⓑ Ⓒ Ⓓ 60. Ⓐ Ⓑ Ⓒ Ⓓ | 61. Ⓐ Ⓑ Ⓒ Ⓓ 62. Ⓐ Ⓑ Ⓒ Ⓓ 63. Ⓐ Ⓑ Ⓒ Ⓓ 64. Ⓐ Ⓑ Ⓒ Ⓓ 65. Ⓐ Ⓑ Ⓒ Ⓓ 66. Ⓐ Ⓑ Ⓒ Ⓓ 67. Ⓐ Ⓑ Ⓒ Ⓓ 68. Ⓐ Ⓑ Ⓒ Ⓓ 69. Ⓐ Ⓑ Ⓒ Ⓓ 70. Ⓐ Ⓑ Ⓒ Ⓓ 71. Ⓐ Ⓑ Ⓒ Ⓓ 72. Ⓐ Ⓑ Ⓒ Ⓓ 73. Ⓐ Ⓑ Ⓒ Ⓓ 74. Ⓐ Ⓑ Ⓒ Ⓓ 75. Ⓐ Ⓑ Ⓒ Ⓓ 76. Ⓐ Ⓑ Ⓒ Ⓓ 77. Ⓐ Ⓑ Ⓒ Ⓓ 78. Ⓐ Ⓑ Ⓒ Ⓓ 79. Ⓐ Ⓑ Ⓒ Ⓓ 80. Ⓐ Ⓑ Ⓒ Ⓓ |
|--|--|--|--|





American Plumbing Institute

Affordable and Easy to Use Continuing Education for Plumbers

OREGON PLUMBERS --- CONTINUING EDUCATION

PO Box 1445 • Queen Creek, AZ 85142

www.apiceu.com

Oregon: UPC Definitions Course No. 5000213Vt • 4 hours

DISCLAIMER NOTE: This course is APPROVED by the Oregon Building Codes Division for continuing education to renew your plumbing license and is not intended to replace or supersede any state or local adopted codes.

Oregon: UPC Definitions

Oregon: UPC Definitions

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

Category 3. Facility systems in which failure of such equipment is not likely to cause injury to patients or caregivers, but can cause patient discomfort.

Exam Room Sink. A sink used in the patient exam room of a medical or dental office with a primary purpose for 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 Water jets
 - B. Uses High Temperature Steam
 - 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. IV
 - B. II
 - C. I
 - D. III
4. **What is the primary purpose of an exam room sink?**
 - A. Water for the patient
 - B. Washing of instruments
 - C. Washing of hands
 - D. All listed answers
5. **What does "ABS" stand for?**
 - A. Alonitrile-butadiene-styrene
 - B. Acrylonitrile-butane-styrene
 - C. Acrylonitrile-butadiene-styrene
 - D. Acrylontile-butadiee-styrene
6. **What best defines a vent that does not receive the discharge of any sewage or waste?**
 - A. Main Vent
 - B. Wet Vent
 - C. Branch Vent
 - D. Dry Vent
7. **What controls and guides the flow of water?**
 - A. Nozzle
 - B. Fixture Fitting
 - C. Fixture
 - D. Spigot
8. **A conducting object through which a direct connection to the earth is established is best defined as a?**
 - A. Grounded Conductor
 - B. Grounding Electrode Conductor
 - C. Equipment Grounding Conductor
 - D. Grounding Electrode
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. Backflow Connector
 - B. Backflow Preventer
 - C. Aspirator
 - 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. Flanged, Joint
 - B. Joint, Flanged
 - C. Joint, Flared
 - D. Joint, Mechanical
12. **What is known as the evacuation of exhaled mixtures of oxygen and nitrous oxide?**
 - A. Arterial gas embolism
 - B. Expelling
 - C. Expel
 - D. Scavenging
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 Backsiphonage, Backpressure Backflow.

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 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.

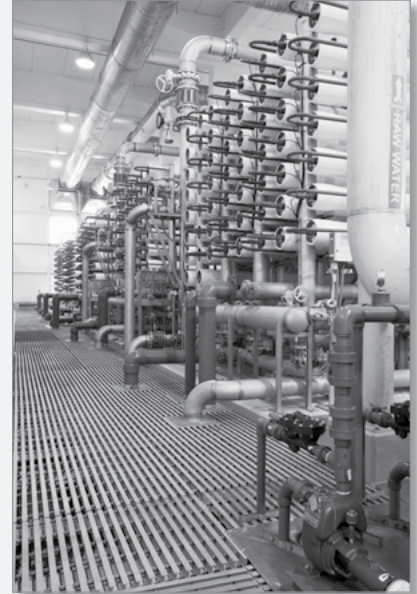
Building Drain (Storm). A building drain that conveys storm water or other drainage, but no sewage.

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?
- Vent
 - Fixture Branch
 - Branch
 - Branch, Fixture
15. A building sewer that conveys sewage only is known as?
- Building Sewer (Dedicated)
 - Building Sewer (Storm)
 - Building Sewer (Combined)
 - 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?
- Backflow
 - Backflow Connection
 - Backpressure Backflow
 - 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?
- Backflow
 - Backflow Connection
 - Backpressure Backflow
 - Backflow Preventer
18. An outlet on a boiler to permit emptying or discharge of sediment is defined as?
- Blowoff Valve
 - Boiler Blowoff
 - Emergency Blowoff Valve
 - 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?
- Backflow
 - Backflow Connection
 - Backpressure Backflow
 - 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?
- Backpressure Backflow
 - Backflow Connection
 - Backsiphonage
 - 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?
- Restroom
 - Water Closet
 - Powder Room
 - Bathroom Group
22. A building drain that conveys sewage only is known as?
- Building Sewer (Combined)
 - Building Drain
 - Building Drain (Storm)
 - Building Drain (Sanitary)
23. A room equipped with only a water closet and lavatory is known as a?
- Bathroom Group
 - Water Closet
 - Bathroom, Half
 - Restroom
24. A building sewer that conveys both sewage and storm water or other drainage is known as?
- Building Sewer (Storm)
 - Building Sewer (Sanitary)
 - Building Sewer (Combined)
 - 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?
- Battery of Fixtures
 - Bathroom, Half
 - Bathroom Group
 - 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?
- Main Bond Jumper
 - Grounded Conductor
 - Equipment Grounding Conductor
 - Bonding Jumper
27. What best defines a device installed in a drainage system to prevent reverse flow?
- Backwater Valve
 - Backflow Preventer
 - Backflow Connection Valve
 - Backpressure Backflow Valve
28. What best defines a building drain that conveys storm water or other drainage, but no sewage?
- Building Drain (Sanitary)
 - Building Drain (Storm)
 - Building Drain
 - Building Drain (Combined)
29. What best defines a vent connecting one or more individual vents with a vent stack or stack vent?
- Branch Vent
 - Primary Vent Line
 - Vent Branch
 - Vent System
30. An arrangement whereby backflow can occur is defined as?
- Backflow
 - Backflow Connection
 - Backpressure Backflow
 - 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?
- Building Drain
 - Building Drain (Sanitary)
 - Building Drain (Storm)
 - Building Sewer (Combined)

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 other 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 by means of a common waste and vent pipe, adequately sized to provide free movement of air above the flow line of the drain.



Exam Questions:

32. 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?
- Combination Waste and Vent System
 - Waste and Vent System
 - Vent System, Main
 - Vent Waste Combination System
33. 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?
- Culvert
 - Drainage ditch
 - Cesspool
 - Drainage field
34. What term best defines a bed pan washer?
- Clinical sink
 - Sanitary sink
 - Closet, Portable
 - Waterless Water Closet, Portable
35. 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?
- Combined Building
 - Combination Thermostatic Waste
 - Water Waste
 - Clear Water Waste
36. 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?
- Pressure Balancing Valve, Combination
 - Combination Pressure Balancing Valve
 - Combination Thermostatic/Pressure Balancing Valve
 - Combination Valve
37. What best defines a building sewer that conveys storm water or other drainage, but no sewage.
- Building Sewer (Combined)
 - Building Sewer
 - Building Sewer (Storm)
 - Building Sewer (Dedicated)
38. What best defines that portion of a drainage system that does not drain by gravity into the building sewer?
- Building Subdrain
 - Building Sewer
 - Building Sewer (Combined)
 - 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.

CPVC. Chlorinated Poly (Vinyl 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:

39. 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?
- Continuous Waste
 - Hazard
 - High Hazard
 - Contamination
40. What does CPVC stand for?
- Chlorinate Post (Vinyl Chloride)
 - Chlorinated Poly (Vinyl Chloride)
 - Chlorinated Porous (Vinyl Chloride)
 - Chloride Poly (Vinyl Chlorinate)
41. What best defines the minimum elevation above the floodlevel rim of the fixture or receptor served at which the device may be installed?
- Emergency Room
 - Critical Care Area
 - Critical Care Level
 - Critical Level
42. 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?
- Continuous Waste
 - Continuous Drain
 - Commercial Drain
 - Combined Drain
43. Would it be considered acceptable or a violation of this code to cross connect a fixture tank to the potable water system?
- Violation
 - Acceptable
44. A vertical vent that is a continuation of the drain to which it connects is best defined as?
- Combined Vent
 - Continuous Vent
 - Conductor
 - Continuous Waste Vent
45. 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?
- Excluder
 - Shredder
 - Debris Excluder
 - Debris Mulcher
46. 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?
- Conductor
 - Storm Drain
 - Waste Pipe, Storm
 - Combined Sewer System
47. 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?
- Chief Plumbing Inspector
 - Authority Having Jurisdiction
 - Plumbing Inspector
 - Department Having Jurisdiction
48. What does the UPC define as the length along the center line of a pipe and fittings?
- Adjacent
 - Total Length
 - Center to Center
 - Developed Length

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. 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.

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:

49. What is a pipe that carries waste or waterborne wastes in a building drainage system?
- Durham System
 - Downspout
 - Drain
 - Drainage System
50. 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?
- Effective Ground-Fault Current Path
 - Ground-Fault Current Path
 - Equipment Grounding Conductor
 - Tracer Wire
51. What is known as a plumbing system or any part thereof that has been installed prior to the effective date of this code?
- Existing Installation
 - Grandfathered
 - Existing Work
 - All listed answers
52. 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?
- Equivalency Fluid
 - Nontoxic Fluid
 - Equivalency Transfer Fluid
 - Essentially Nontoxic Transfer Fluid
53. 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?
- Durham System
 - Drainage System
 - Downspout
 - Domestic Sewage
54. What is best defined as the time period that a penetration firestop system will limit the spread of fire through the penetration?
- UL Number
 - F Rating
 - UL Installation assembly
 - F Installation assembly
55. What is the water supply pipe connecting the fixture with the fixture branch known as?
- Supply Fixture
 - Fixture Supply
 - Fixture Branch
 - Branch Supply
56. What best defines the drain from the trap of a fixture to the junction of that drain with any other drain pipe?
- Fixture Drain
 - Fixture Trap
 - Fixture Junction
 - Drain Junction
57. The water supply pipe between the fixture supply pipe and the water distribution pipe is known as the?
- Fixture Supply
 - Fixture Branch
 - Branch Supply
 - 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 the purpose of 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:

58. 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
59. What listed definition would satisfy the definition of flood level?
 - A. Flood Level Zone
 - B. Flooded
 - C. Flood-Level Rim
 - D. Flood Plain
60. 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
61. 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

62. 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?
- Flush Valve tank
 - Flush Tank
 - Flushometer Tank
 - Tank
63. A fixture is considered _____ when the liquid therein rises to the flood-level rim.
- Maxed
 - Flooded
 - Plugged
 - Non Functional
64. 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?
- Flushometer Valve
 - Flush Valve
 - Flush Tank Valve
 - Tank Valve
65. At what percentage does the concentration of flammable constituents in the air exceed a materials lower flammability limit?
- 15
 - 20
 - 25
 - 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 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.

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:

66. A Gravity Grease Interceptor is normally installed _____.
- A. In full view of the drainage system
 - B. Inside
 - C. In a confined area
 - D. Outside
67. Where are you directed to look by the UPC to find the definition for Hangars?
- A. Supports
 - B. Support Systems
 - C. Hanging Systems
 - D. Methods, Vertical Systems
68. 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
69. 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

70. A hydromechanical grease interceptor can be operated _____.
- Remotely
 - Automatically
 - Manually
 - All Listed Answers
71. 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?
- Chemical-Fusion Weld Joints
 - Cold-Fusion Weld Joints
 - Heat-Fusion Weld Joints
 - Cold-Chemical Weld Joints
72. What best defines the slope or fall of a line of pipe in reference to a horizontal plane?
- Slope Line
 - Grade
 - Fall Angle
 - Incline
73. A Horizontal Pipe makes an angle of less than _____ degrees with the horizontal.
- 50
 - 60
 - 45
 - 90
74. 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?
- Ambulatory Care Facility
 - General Care Areas
 - Assisted Care Areas
 - All listed answers
75. Wastewater from bathtubs, showers, lavatories, clothes washers, and laundry tubs is known as?
- Wastewater Discharge
 - Brown Water
 - Gray Water
 - Non Treated Water

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 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.

Indirect Waste Pipe. 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.

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:

76. **What is the lowest portion of the inside of a horizontal pipe called?**
- Inside Low Point
 - Deep Well
 - Bottom
 - Invert
77. **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?**
- Storm Water Pipe
 - Indirect Waste Pipe
 - Sewer Waste Pipe
 - Individual Waste Pipe
78. **What is the process of obtaining a gastight joint by the joining of metal parts in the plastic molten state?**
- Joint, Fusion
 - Joint, Welded
 - Joint, Brazed
 - Joint, Soldered
79. **What is not included with regards to industrial waste?**
- Treated Sewage
 - Chemical Wastes
 - Corrosive Wastes
 - Domestic Sewage
80. **What is the process of joining metal parts with alloys that melt at temperatures exceeding 840°F known as?**
- Joint, Brazed
 - Joint, Welded
 - Joint, Soldered
 - Joint, Fusion