

Waste Water Engineering



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C

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Seasonal Assignment

No 2

Submitted to

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QNO1

Answer:

Soil Pipes:

A pipe that conveys sewage or wastewater reliably either from the toilet or sinks to a soil drain or sewer.

Needless to say, there are many pipes within your home that carry water, but there are just as many that carry waste from your property.

As the place to go for every pipe requirement, you will discover a wide range of soil pipe or total pipe line system.

Anti-Siphon pipes:

An extra pipe connected to the outlets of toilet seats of all the floors, the other end of which is exposed to atmosphere is called anti-siphon pipes. These are provided to maintain water seal, so that foul gases of the sewer line do not find entry into the toilet or bathrooms.

If we look into a toilet seat we find some water at the bottom, which remains there even after flushing. The seats are designed with a trap so that the water remains in the seat.

The water is maintained to prevent entry of foul gases from the toilet pipe/soil pipe/sewer lines into the toilet room. This is called water seal.

QNO 2:

Answer:

Sanitary Fixture:

It is a receptacle for industrial and fecal sewage that is installed in homes, public and industrial buildings. Sanitary fixtures are attached to the interior system of water pipes and sewerage systems and constitute the main elements of a building's sanitary engineering equipment.

Sanitary fixtures are installed in different areas. Bath tubs, washstands, Shower Sumps, traps and bidets are installed in bathroom, washrooms and shower rooms.

It is also used in medical institutions, laboratories, bathhouses, barber shops and beauty salons and on transportation facilities. Sanitary fixtures are equipped with hydrants or faucets that deliver both hot and cold water.

Trap (plumbing):

In plumbing, a trap is a device shaped with a bending pipe path to retain fluid to prevent sewer gases from entering buildings while allowing waste materials to pass through.

In oil refineries, traps are used to prevent hydrocarbons and other dangerous gases and chemical fumes from escaping through drains.

In domestic applications, traps are typically

U, S, Q or J-Shaped pipe located below or within a plumbing fixture. If there a volume of water may be rapidly discharge through the trap, a vertical vented pipe called a stand pipe may be attached to the trap to prevent the disruption of the seal in other nearby traps.

QNO3

Answer:

Cross Connection:

A Cross-Connection is any temporary or permanent connection b/w public water system or consumer's potable (i.e drinking) water system and source or system containing non-potable water or other substances. An example is the piping between a public water system or consumer's potable water system while draining the wash and rinse cycles.

Back-siphonage:

Back-Siphonage is backflow caused by a negative pressure (i.e a vacuum or partial vacuum) in a public water system or consumer's potable water system. The effect is similar to drinking water through a straw. Back Siphonage can occur when there is a stoppage of water supply due to nearby firefighting, a break in a water main etc...

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