Assignment #02.

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Subject : Waste water Engineering

Section : B

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Soil pipe :-

A soil pipe is designed to carry soiled water from the toilet, urinal or bidet to the sewer.
A waste ~~water~~ pipe carries water from your sinks, shower, washing machine or bath.
This type of pipe will carry water and solids into the sewer. while any pipe could physically perform the task. the soil pipe also known as vent pipe, as installed in most homes has a specific quality. First, it is of a dimension to allow solid waste to pass. second, it is vented in a very specific way to maintain a safe environment and reduce odours. Soil pipe are vented high at the top of

near the top of the building thanks to soil pipe stacks, to allow gases produced by waste to prevent safely into the atmosphere. Such gases can be harmful to health so venting them high keeps them out of the way.

Anti Syphon Pipe:-

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-syphonage pipe. It is difference of air pressure causes the water seal in the toilet seat to get sucked out into the pipe.

Sanitary Fixtures

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

Sanitary fixtures are installed in different areas. Bath tubs, wash-stands, shower sumps, traps, and bidets are installed in bathrooms, washrooms, and shower rooms. Toilet bowls lavatory pans, and urinal of various types wether equipped with flush tanks or traps, are installed in lavatories

washers, sinks and drains are installed in Kitchens.

Sanitary trap :-

In plumbing, a trap is a device shaped with a bending pipe bath to the retain fluid to prevent sewer gases from entering building while allowing waste materials to pass through. In domestic applications, traps are typically U, S, Q or J-shaped pipe located below below or with in a plumbing fixtures The most common of these traps are referred to as a P trap.

Plumbing is a work that is mainly related to supply of water and disposal of sewage. The plumbing systems

shall remain odourless provided, it is designed skillfully and installed decently.

(3) Cross - Connection :-

It is can be defined as actual or potential connections between a potable and non-potable water supply.

→ Example - Hose Bib.

Cross connection existance :-

→ Lack of Knowledge - plumbing connections are frequently installed by individuals who are unaware the inherent dangers of cross connections.

→ The cross connections are made as a matter of convenience without regard to the dangerous situations that might be created

→ The connections are with reliance on inadequate protection (such as a single valve or another mechanical device.

Backflow:-

This can be defined as fluid flow in an undesirable or reverse direction.

~~**Back Siphonage:-**~~

Back Siphonage:-

Caused by atmospheric pressure exerted on a pollutant liquid forcing it toward a portable water supply system that

is under a vaccume.

→ A backflow prevention device is used to protect potable water supplies from contamination or pollution due to backflow.
In water distribution system, water is normally maintained to a significant pressure to enable water to flow from the tap, shower, or other fixture.