



IQRA NATIONAL UNIVERSITY PESHAWAR

ASSIGNMENT NO 02

DEPARTMENT OF CIVIL ENGINEERING

SUBJECT: WASTER WATER ENGINEERING
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SECTION: C

Q1:- soil pipes and anti-siphon pipes.

ANS:- soil pipes:- soil pipe is a pipe that conveys sewage or wastewater reliably, either from the toilet or sink 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.

Anti-siphon pipes:- An extra pipe connected to the outlet of pipe toilet seats of all the floors, the other end of which is exposed to atmosphere is called anti-syphonage pipe. These are provided to maintain water seal so that foul gases of the sewer line do not find entry in to the toilet. When some one of the toilets in the upper

Floors is flushed.

Q2:- Sanitary Fixtures and trap.

Ans:- Sanitary Fixtures:- A receptacle for industrial and fecal sewage that is installed in homes and public places. Sanitary fixtures are attached to the interior systems of water pipes and sewerage system and constitute the main elements of a building sanitary engineering equipment. Sanitary fixtures are installed in different areas. Bath tubs, washstands, showers, sumps, traps and bidets are installed in bathrooms. Toilet bowls, lavatories, and urinal of various types whether equipped with flush tanks or taps. Special sanitary fixtures are used in medical institutions, laboratories, barber shops.

⇒ Sanitary Traps: - A trap is a device shaped within a bending pipe path to retain fluid to prevent sewer gases from entering buildings while allowing waste material to pass through. In oil refineries, traps are used to prevent hydrocarbons and other dangerous gases and chemical fumes from escaping through drains.

Q3: - Cross Connection: - A cross connection is a point in a plumbing system where it is possible for a nonpotable substance to come into contact with the potable drinking water supply. Common examples of cross-connection include a garden hose submerged in a pesticide mixture, a piped connection providing potable feed water to

industrial process, such as a cooling tower, or a submerged outlets of an irrigation system.

A cross connection is a temporary or permanent link between a potable drinking water system and any source containing non-potable water or other substance from which backflow may occur.

⇒ Backsiphonage: - It is a reversal normal flow in a system caused by a negative pressure in the supply piping. Backflow caused by a downstream pressure that is greater than the upstream or supply pressure in a public water system or consumer potable water system. Back pressure can result from an increase in downstream pressure.

