

EEE - Assignment - 4

Q.1 Which of the following sewage systems carry domestic & industrial waste water?

A.1 a) ~~san~~ sanitary sewers

Q.2 Trickling filter is used in which of the foll. wastewater treatment processes?

A.2. b) Secondary treatment

Q.3. Which treatment method is used ~~to~~ when the TSS in the sample is high?

A.3. (a) Methane

Q.4 Which treatment method is used when the TSS in the sample is high?

A.4. b) High rate solid clarifier

Q.5. Activated sludge is the -

A.5. c) sludge in the secondary tank post aeration, rich in microbial mass.

Q.6. Explain the working of grit chamber.

A.7. • The grit chambers work as a sedimentation tank which is designed to separate the intended heavier inorganic materials & to pass forward the lighter organic materials.

- It is a long narrow or circular tank in the primary sewage treatment plant.

- It reduces the velocity of flow of sewage to eliminate the grit materials such as sand, ash

and clinkers, egg shells, bone chips etc.

Q.6. Explain ~~the~~ any two differences between attached system & suspended system.

A.6. ~~Attached System~~ ~~Suspended System~~

1. ~~Mixed Community of~~ ~~Stir & suspend~~ microorganisms.

2. Both aerobic & anaerobic bacteria may exist.

3. Biological floc is formed.

1. Stir & suspend microorganisms in waste water

2. Settled out as a sludge

Attached System

Suspended System

1. Grow microorganisms on substrates such as rocks, sand or plastic.

2. Wastewater is spread over the substrate.

Ex: Trickling filters, Rotating biological contactors

1. Stir & suspended microorganisms in waste water.

2. Settled out as sludge & pumped back into the incoming waste water

Ex: Activated Sludge, Extended aeration