

**TCE-505**

**1263**

Printed Pages : 3

Paper Code & Roll No. to be filled in your Answer Book

Roll No.

--	--	--	--	--	--	--	--	--	--

**B.Tech. III Year V Sem.**

Even End Semester Examination-2015

**ENVIRONMENTAL ENGG-II**

*Time : 3 Hours]*

*[Maximum Marks :100*

Answer Any Four:

(4x5=20)

1. Explain in brief the various physical, chemical and microbiological characteristics of wastewater.
2. Briefly explain the characteristics of sewage and state their discharge standards.
3. How does crown corrosion occur in sewer?
4. Under what circumstances manholes are provided in sewerage system.
5. Name the two factors used as criteria for selection of pipe diameter and slope in design of sewer.

Answer Any Four:

(4x5=20)

1. Explain how domestic sewage is different from industrial waste.
2. Discuss the significance of velocity control devices in grit chamber.

TCE-505 / 2200

(1)

P.T.O.

3. What are the factors affecting self purification of polluted streams?

4. Suggest a treatment scheme for the treatment of oil refinery effluent.

5. What is the role of methanogens in anaerobic digestion?

Answer Any Two: (2x10=20)

1. Explain with neat sketch the working of a UASB reactor. What is the principle on which it works?

2. Why recycling of some parts of sludge is necessary in the activated sludge process? Mention the advantages and disadvantages of activated sludge process.

3. Differentiate between stabilization ponds and aerated lagoon. Write the mechanism of Oxidation Pond.

Answer Any Two: (2x10=20)

1. What is agricultural irrigation? What are its advantages over the method of disposal of wastewater by dilution? What precaution should be taken while disposing the wastewater on the agricultural land?

2. Enumerate the various methods that can be used to dispose of the digested sludge. Discuss in details the working of any of these two important methods, which are useful in Indian conditions.

3. What are the advantages and disadvantages of septic tanks?

Answer Any Two:

(2x10=20)

1. Suggest a treatment scheme for the treatment of distillery effluent. Write down the characteristics of the distillery effluent.
2. Define municipal solid waste and explain the necessity of its safe disposal.
3. Write a brief note on the status of collection and transportation of municipal solid waste in India.

—x—