

BACHELOR OF TECHNOLOGY (C.B.C.S.) (2014 COURSE)
B.Tech.Sem - VI CIVIL :SUMMER- 2022
SUBJECT : ENVIRONMENTAL ENGINEERING-I

Day : Wednesday
Date : 15-06-2022

S-13610-2022

Time : 02:30 PM-05:30 PM
Max. Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answer to all sections should be written in the **SAME** answer book.

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- Q.1** a) What are different sources of water? Explain factors affecting water demand? (05)
b) What are drinking water quality standards? Explain water quality standards for hardness and fluorides (05)
- OR**
- Q.1** a) What are common impurities present in water? Explain their effects on human health. (05)
b) What are various demands of water in a city? Explain. (05)
- Q.2** a) What is the necessity of aeration of water? Explain its advantages. (05)
b) What are tube settlers? Explain advantages of tube settlers. (05)
- OR**
- Q.2** a) Enlist different methods of aeration? Explain any one method. (05)
b) With the help of neat sketches, describe circular sedimentation tank. (05)
- Q.3** a) Explain with sketch working and washing of rapid sand filter. (05)
b) Compare rapid sand filter and slow sand filter. (05)
- OR**
- Q.3** a) What are different membrane technologies used in water treatment? Explain desalination of water. (05)
b) What is the significance of free and combined residual chlorine in water? Explain. (05)
- Q.4** a) What are primary pollutants and secondary pollutants? Give examples. (05)
b) What are the effects of gaseous pollutants on human health? (05)
- OR**
- Q.4** a) What is the necessity of ambient air quality standards and emission standards? Explain. (05)
b) Explain with sketch working of gravity settling chamber. (05)
- Q.5** a) What are the sources of solid and hazardous waste? Explain. (05)
b) What is composting? Explain bio composting. (05)
- OR**
- Q.5** a) Explain with sketch Sanitary landfill. (05)
b) What are the elements of integrated Solid waste management? Explain. (05)
- Q.6** a) Explain the importance of Environmental Management. (05)
b) Write a note on: Environment management plan. (05)
- OR**
- Q.6** a) What is life cycle assessment? What are its advantages? (05)
b) Write a note on: Air act in India. (05)