

B.Tech. SEM -VI (Civil) 2014 Course (CBCS) : WINTER - 2018

SUBJECT: ENVIRONMENTAL ENGINEERING - I

Day: Wednesday
Date: 14/11/2018

W-2018-2450

Time: 10.00 AM TO 01.00 PM
Max Marks. 60

N.B. :

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks
 - 3) Assume suitable data, if necessary.
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- Q.1** a) What are the factors affecting water demand? Explain. (05)
b) Explain the different characteristics of drinking water. (05)
OR
- Q.1** Draw a flow sheet of water treatment plant with ground water as source of water. Explain the function of each unit. (10)
- Q.2** a) What are the advantages of aeration of water? Explain fixed spray aerator. (05)
b) Explain inlet and outlet arrangements of a sedimentation tank. (05)
OR
- Q.2** a) What is coagulation-flocculation? Explain factors affecting flocculation. (05)
b) What is the necessity of tube settler in sedimentation tank? Explain tube settler. (05)
- Q.3** a) What are different types of filters? Explain dual media and multimedia filters. (05)
b) Write a note on break point chlorination. (05)
OR
- Q.3** a) Explain desalination of water by using membrane technology. (05)
b) What is the necessity of backwashing of filter? Explain backwashing. (05)
- Q.4** a) Explain ambient air quality standards. (05)
b) Write a note on classification of air pollutants. (05)
OR
- Q.4** a) Explain emission standards. (05)
b) Write a note on electrostatic precipitator. (05)
- Q.5** a) Explain about handling and segregation of waste at source. (05)
b) Write a note on composting of solid waste. (05)
OR
- Q.5** a) What is the necessity of sanitary landfills for disposal of solid waste? (05)
b) What is the importance of recycle and reuse of solid waste? (05)
- Q.6** a) What are the fundamentals of environment management? Explain. (05)
b) What are elements of environment management plan? Explain. (05)
OR
- Q.6** a) What is environment audit? Explain its advantages. (05)
b) Explain environmental laws in India. (05)

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