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Roll No. ..... Total Pages : 2

002504

Jan. 2022

B.Tech. (Civil)- V SEMESTER

Environmental Engineering and Management//

Environmental Engineering (PCC-CE306R//PCC-CE-306)

Time : 90 Minutes] [Max. Marks : 25

Instructions :

1. *It is compulsory to answer all the questions (1 mark each) of Part-A in short.*
2. *Answer any three questions from Part-B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*

PART-A

1. (a) What is per capita demand(q)? (1)

(b) What is Ion Exchange Method? (1)

(c) What is the maximum permissible TON for a domestic water supply source? (1)

(d) Explain COD. (1)

(e) What is anaerobic digestion? (1)

(f) Dioxin is released during which of the solid waste disposal methods? (1)

(g) Why is electrostatic precipitator used? (1)

(h) What is the acceptable outdoor noise level in industrial areas? (1)

(i) Why are storage tanks used? (1)

(j) List the instruments used for measurement of turbidity. (1)

PART-B

2. (a) Convert 120 mg/cubic meter of SO_2 concentration into ppm. (3)

(b) Explain any *two* control devices for particulate air pollution. (2)

3. (a) Two sources generate noise levels of 90 dB and 94 dB. Find the cumulative effect of these two noise levels on the human ear. (2)

(b) Explain with the help of a diagram: Time period, Amplitude, Wavelength. (3)

4. Explain any *five* water treatment processes. (5)

5. Classify the types of Solid waste and explain solid waste disposal techniques. (5)

6. (a) Compute the fire demand for a city of 2 lac population (Use any formula of choice). (2)

(b) List some measures for monitoring and control of environmental pollution. (3)
