

Total No. of Questions : 8]

[Total No. of Printed Pages : 2

Roll No

CM-7003-CBGS

B.E. VII Semester

Examination, June 2020

Choice Based Grading System (CBGS)

Environmental Engineering

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) What is Environmental Impact Assessment? Explain how it is useful for safe guarding environment from industrial pollution. 7
- b) Giving suitable examples. Explain the step required for sustainable industrial development. 7
2. a) What are the important legislative provisions in India for the protection of Environment? Explain major provisions briefly. 7
- b) Explain Electrostatic precipitator 7
 - i) Diagram
 - ii) Working principal
 - iii) Advantages and disadvantages
3. a) Calculate the efficiency of removal of a 2.5 μm diameter particle having a density of 1250kg/m^3 for a cyclone with barrel diameter of 1.0m the gas flow rate is $2.80\text{m}^3/\text{s}$ and the gas temperature is 25°C . 7
- b) Write a descriptive note on inversion and types of flume. 7

CM-7003-CBGS

7
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4. a) Explain various steps during treatment of industrial waste water with neat sketch. 7
- b) What do you understand by water pollution control act? Explain limit of waste water characteristics. 7
5. a) What are the major problems due to the hazardous waste? Explain handling and treatment process. 7
- b) What are the solid waste management? Discuss the methods of solid waste minimization and treatment of industrial solid waste. 7
6. a) List five effects of noise other than hearing loss also list three basic elements. That might require alternation or modification to solve a noise problem. 7
- b) What are the major pollution problems from cement and steel industrial process? 7
7. a) Discuss the effects of pulp and paper industries on local water quality. 7
- b) With respect to air, water and solid waste pollution present a case study an petrochemical industry. 7
8. Write short notes on any three: 14
 - i) Activated sludge process
 - ii) Noise measurement
 - iii) BoD test of waste water
 - iv) Design of MSW incinerator

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