



AUTUMN END SEMESTER EXAMINATION-2015

1st Semester B.Tech & B.Tech Dual Degree

EVS (CH-1005)

(Regular-2015 Admitted Batch)

Full Marks: 60

Time: 3 Hours

Answer any SIX questions including Question No.1 which is compulsory.

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable and all parts of a question should be answered at one place only.

1. (a) Define Chlorofluoro Carbon. Deduce the formula of $[2 \times 10]$ CFC-11.
- (b) Distinguish between Primary and Secondary air Pollutants with examples.
- (c) Discuss the origin of waste water in brief.
- (d) What is biomedical waste? Give two examples.
- (e) Why thermal pollution is considered a water pollutant.
- (f) What are the causes and effects of Acid rain?
- (g) What is pollutant? Explain the difference between contaminant and a pollutant.
- (h) Define Lapse rate.
- (i) What is R^4M^4 Model? Explain.
- (j) What is green house effect? Name different greenhouse gases.

(1)

2. (a) The radiated energy from the sun is incident on the earth at a rate of 1400 Wm^{-2} . The distance between the sun and the earth's surface is $1.5 \times 10^{11} \text{ m}$ and the radius of the sun is $7 \times 10^8 \text{ m}$. Calculate the temperature of the surface of the sun assuming the sun as a black body. [4]
- (b) Discuss the mechanism of heat transfer in the environment. [4]
3. (a) What do you mean by Coagulation and flocculation? Why are they necessary and what are their effects? [4]
- (b) Draw a sketch of Bag house filter. Also describe it's working principle. [4]
4. (a) Explain solid waste. Discuss different methods to minimize its adverse effect on the environment. [4]
- (b) Explain composting and incineration of solid waste disposal. [4]
5. (a) What are different sources of water? Explain Point and Non point sources of water with example. [4]
- (b) Explain 5 days BOD test in details. [4]
6. (a) Discuss the different parameters of Water quality. How Hardness and D.O can be determined? [4]
- (b) What is lithosphere? Discuss the different layers of soil. [4]

7. What is Environmental Impact Assessment? Discuss the steps involved in the preparation of Environmental Impact statement (EIS). [8
8. Write notes on (any two) [4 × 2
Oxidation Pond, Troposphere, Global Warming,
Electrostatic precipitator (any two)

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(3)