Code: 9A01704

SS

B.Tech IV Year I Semester (R13) Supplementary Examinations June 2017

ENVIRONMENTAL ENGINEERING – II

(Civil Engineering)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1 (a) Describe the historical background and causes of air pollution.
(b) How does the air pollution affects the different zones of the atmosphere?

2 Enumerate and describe in brief (with neat sketches) the various engineering devices that are used to control the emissions of gaseous air pollutants from industries.

3 (a) Define defluoridation and the process involved in this method.
(b) Brief note on ion exchange.

4 (a) Explain the importance of neutralization and equalization tank.
(b) Differentiate nitrification and denitrification. Explain the nitrogen cycle involved in this process.

5 (a) Describe and explain the importance of 'recycling and reuse' in disposal of solid waste of a society. Which items are generally recycled from the MSW?
(b) Brief note on the status of collection and transportation of municipal solid waste in India.

6 (a) Enumerate the various methods which can be used for the disposal of municipal solid waste management. Explain any two of them.
(b) Mention the most significant property of the city refuse which guides the adoption of each of the following methods of refuse disposal: (i) Incineration. (ii) Composting.

7 (a) How are radioactive waste generated in production of nuclear power? Explain the Uranium fuel cycles.
(b) Explain the various methods which are used for safe disposal of hazardous solid and liquid waste from hospitals and nursing homes.

8 (a) Define 'noise' and explain as to how and why it should be regarded as an environmental pollutant.
(b) Differentiate between L_n, L_{eq} and L_{dn} in relation to expression of sound levels.

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