

[Total No. of Questions - 9] [Total No. of Printed Pages - 2]

Dec.-22-1363

MCE-104(E) (Environmental Engineering & Management)

M.Tech. 1st (CE) (CBCS)

Time : 3 Hours

Max. Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt five questions in all selecting one from each unit.
Question no. 9 is compulsory.

UNIT - I

1. Write a note on:
 - (a) Global warming and its impact on environment both Nationally and Internationally.
 - (b) Ozone depletion and its primary cause. (5+5=10)
2. Discuss ecosystem and its types in detail. Give the concept of energy flow in ecosystem. (10)

UNIT - II

3. Discuss in detail:
 - (a) Better industrial processes.
 - (b) Disposal of solid waste and its management. (5+5=10)
4. Define noise pollution, sources and measurement. What are its harmful effects on human beings and atmosphere? (10)

UNIT - III

5. How do you define pollution as per Water (Prevention and Control of Pollution) Act, 1974? What are the salient features of the Act? (10)

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6. Why do we refer to Environment Protection Act, 1986 as an Umbrella Act? Discuss the major Environmental Protection Rules, 1986. (10)

UNIT - IV

7. Why there is need of cleaner production techniques? What is the impact of zero impact manufacturing on environment. (10)
8. Discuss in detail the EIA of following: -
 - (a) Hydro Power Project
 - (b) Cement Plant (5+5=10)

(Compulsory Question)

9.
 - (a) Define acid rain with its harmful effects.
 - (b) Significance of carbon credits.
 - (c) What are the main components of the soil?
 - (d) What is a biochemical oxygen demand (BOD)? Explain BOD test.
 - (e) Define dissolved oxygen. What are the factors affecting dissolved oxygen? (5×4=20)