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DEC-23-0345

HS-102 (Environment Science)

B.Tech-1st (CBCS)

Time : 3 Hours

Max. Marks : 60

Note: Attempt Five questions in all, selecting one question each from Section A, B, C and D. Section E is compulsory.

SECTION-A

1. (a) Write a note on importance of environmental studies. (6)
(b) What do you understand by deforestation? (4)
2. (a) What is meant by energy resources? Explain renewable and non-renewable energy resources. (6)
(b) Discuss nitrogen cycle with flow chart. (4)

SECTION-B

3. (a) Define the ecosystem. Explain the functional characteristics of ecosystem services to human society. (8)
(b) Define food chain with one example. (2)
4. (a) Explain productive, social, ethical values of biodiversity. (8)
(b) Distinguish endangered and endemic species of India. (2)

SECTION-C

5. (a) What do you understand by ozone layer? Explain briefly the mechanism of ozone layer. (5)
(b) Discuss Kyoto protocol. (5)

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HS-102

6. (a) What is water pollution and its sources? How water pollution can be controlled? (8)
(b) What are the functions of State Pollution Board? (2)
7. (a) What is chemical toxicology? Discuss the effects of toxic elements in water. (5)
(b) What is waste water treatment? Discuss about its stages. (5)
8. (a) Write a short note on biochemical effects of heavy metals on enzymes. (5)
(b) Discuss the scheme of treatment of municipal waste in water? (5)

SECTION-E

9. Answer all the questions: (10×2=20)
 - (a) What do you understand by lithosphere?
 - (b) Define pyramid of biomass.
 - (c) What is agroforestry?
 - (d) Mention two important features of renewable resources.
 - (e) What is food web?
 - (f) Differentiate: primary and secondary air pollutants.
 - (g) What do you mean by biodiversity?
 - (h) What do you understand by minimata disease?
 - (i) Illustrate Vienna convention.
 - (j) Define the term threatened and extinct species.