Total No. of Questions : 8]

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ENVIRONMENTAL SCIENCE

ENV - 103: Environmental Biology

(2008 Pattern) (Semester - I)

Time: 3 Hours] [Max. Marks: 80

Instructions to the candidates:

- 1) All questions are compulsory.
- 2) All questions carry equal marks.
- 3) Neat diagrams must be drawn wherever necessary.
- 4) Answers to the two sections should be written in separate books.

SECTION - I

Q1) Attempt any two from the following

[10]

- a) Give a concise account of various characteristics of a population.
- b) Discuss the role of microorganisms in environmental conservation.
- c) Comment upon the models of energy flow in an ecosystem.
- **Q2)** Answer any two from the following:

[10]

- a) What are biogeochemical cycles? How they help to maintain stable nutrient composition on earth.
- b) Give an account on tundra biomer.
- c) Discuss the process of ecological succession.
- Q3) Attempt any two from the following:

[10]

- a) Give an account on ecological status of forests in India.
- b) Explain with the help of a diagram sulphur cycle.
- c) Which are the issues involved in conservation of wetlands.

Q4) Write short notes on any two

[10]

- a) Microbes as antimicrobial agents.
- b) Conservation of forests.
- c) Ecotone and edge effect.

SECTION - II

Q5) Attempt any two from the following:

[10]

- a) Which are the various criterias used in defining protected areas in India?
- b) What are quarantine regulations?
- c) What are the problems involved in conservation of biodiverisity?

Q6) Answer any two from the following:

[10]

- a) Explain the role of environmental biotechnology in biodiversity conservation.
- b) Comment upon Indian biodiversity with reference as a megadiversity nation.
- c) Discuss the role of marine ecosystem with reference to resource generation and climate regulation.

Q7) Attempt any two from the following:

[10]

- a) Give an account on global environmental agreements.
- b) Discuss the role of IUCN in conservation of biodiversity.
- c) Explain the role of local communities in wildlife management.

Q8) Write short notes on any two

[10]

- a) Wildlife protection act, 1972.
- b) In-situ conservation.
- c) RAMSAR convention.

