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Total No. of Questions: 16 ] [ Total No. of Printed Pages: 3

# **SEME-410 (A)**

# M.Sc. (IVth Semester) Examination, 2022 ENVIRONMENTAL SCIENCE

Paper - ES-CE-402 (B)

# (Biodiversity and Conservation)

Time: 1½ Hours ] [ Maximum Marks: 40

The Question paper contains three Sections.

Section-A (Marks :  $1 \times 10 = 10$ )

*Note* :- Answer all *ten* questions carries 1 mark each. The answer should not exceed **50** words.

Section-B (Marks:  $3 \times 5 = 15$ )

**Note**: Answer *five* questions by selecting at least *one* question from each Unit. Each question carries **3** marks. Answers should not exceed **200** words.

Section–C (Marks:  $5 \times 3 = 15$ )

**Note**: Answer *three* questions by selecting *one* question from each Unit. Each question carries 5 marks. The answer should not exceed **500** words.

#### Section-A

- 1. (i) Define species diversity.
  - (ii) What do you mean by biodiversity hotspots?

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- (iii) Write names of biodiversity hotspots of India.
- (iv) What is human-wildlife conflict?
- (v) What does 'Red' represent in the IUCN Red List?
- (vi) Give the definition of Bioprospecting.
- (vii) Give names of vegetation zones of Rajasthan.
- (viii) Define Endemism.
- (ix) What is Red Data Book?
- (x) What is a gene pool?

#### Section-B

#### Unit-I

- 2. Explain classification of Biodiversity.
- 3. Differentiate between ex-situ and in-situ biodiversity conservation.
- 4. Differentiate Endangered and Threatened species with examples.

#### Unit-II

- 5. Write a short note on Use of Plants in Traditional Medicine.
- 6. Wild species are important in agriculture. Give reasons.
- 7. Explain plant utility in scientific research and technological inventions.

### Unit-III

- 8. What is the role of animal species in medicine? Explain.
- 9. Differentiate between national park and wildlife sanctuary.
- 10. Describe role of animals in conservation of natural ecosystems.

#### Section-C

#### Unit-I

- 11. What is Biodiversity? What is it important? Discuss the causes of biodiversity declination and strategies of biodiversity conservation.
- 12. Describe Rapid assessment of biodiversity and biodiversity valuation in detail.

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## Unit-II

- 13. Elaborate vegetation zones of India with examples.
- 14. Give a detailed note on value of microbes in medicinal, scientific and technological research solutions and inventions.

### Unit-III

- 15. Describe Ecotourism in wilderness and protected area network.
- 16. Discuss the role of wild and domesticated fauna in human nutrition.