

This question paper contains 4+1 printed pages]

Roll No.

5024-B

M.Sc. (Final) EXAMINATION, 2016

BOTANY

Paper IV-B

(Advanced Ecology)

Time allowed : Three Hours

Maximum Marks : 100

Part A (खण्ड 'अ') [Marks : 20]

Answer all questions (50 words each).

All questions carry equal marks.

सभी प्रश्न अनिवार्य हैं । प्रत्येक प्रश्न का उत्तर पचास शब्दों से अधिक न हो । सभी प्रश्नों के अंक समान हैं ।

Part B (खण्ड 'ब') [Marks : 50]

Answer five questions (250 words each),

selecting one question from each Unit.

All questions carry equal marks.

प्रत्येक इकाई से एक प्रश्न चुनते हुए, कुल पाँच प्रश्न कीजिए । प्रत्येक प्रश्न का उत्तर 250 शब्दों से अधिक न हो । सभी प्रश्नों के अंक समान हैं ।

P.T.O.

Part C (खण्ड 'स')

[Marks : 30]

Answer any two questions (300 words each).

All questions carry equal marks.

कोई दो प्रश्न कीजिए । प्रत्येक प्रश्न का उत्तर 300 शब्दों से अधिक न हो । सभी प्रश्नों के अंक समान हैं ।

Part A

1. What are Prairies and Steppes ?
2. Name *two* grasses found in grassland Ecosystem.
3. What are Nektons ?
4. What is Limnology ?
5. Name the major environmental pollutant.
6. What is greenhouse effect ?
7. Define biological diversity.
8. What is afforestation ?

9. What is recycling ?
10. What are biogeochemical cycles ?

Part B

Unit I

1. Write a short note on grassland climate.
2. Describe the ecology of fire in grassland.

Unit II

3. Give a short account of lentic freshwater biota.
4. What are ecological pyramids ? Give the types of pyramids and what is the shape of pyramid of biomass in freshwater ecosystem.

Unit III

5. What are bioindicators ? Describe.
6. What are the environmental impacts of Industrialization ? Describe.

Unit IV

7. What are natural resources ? Classify them.
8. What is a biosphere reserve ? Give their objectives and name *two* biosphere reserves found in India.

Unit V

9. Write a short account on environmental biotechnology.
10. What is remote sensing ? Explain.

Part C

1. Write short notes on :
 - (i) Nutrition of grassland
 - (ii) Grass-legume association.
2. Describe the production of organic matter in fresh-water ecosystem.

3. Write a note on types of environmental pollution, their effects on plants and control measures.
4. Write short notes on :
 - (i) Increasing pressure on natural resources.
 - (ii) Conservation and management of resources.
5. What are wastelands ? Mention their classification and reclamation.