

[This question paper contains 2 printed pages.]

Sr. No. of Question Paper : 1860

E

Your Roll No.....

Unique Paper Code : 216655

Name of the Course : B.Sc. Life Sciences

Name of the Paper : Ecology and Environmental Management (LSPT-615)

Semester : VI

Duration : 3 Hours

Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt **five** questions in all.
3. Question No. 1 is compulsory.
4. **All** questions carry equal marks.
5. **All** parts of a question must be answered together.

1. (a) Explain the following terms (**any five**) : (5×2=10)

- (i) Pedogenesis
- (ii) Niche
- (iii) Biome
- (iv) Exosphere
- (v) Edge effect
- (vi) Smog
- (vii) Synecology

- (b) Fill in the blanks (**any five**) : (5×1=5)

- (i) _____ are shade preferring plants.
- (ii) _____ is the instrument used to measure wind velocity.
- (iii) _____ is an example of an insectivorous plant.

P.T.O.

- (iv) _____ is the book listing threatened and endangered species of plants and animals.
- (v) _____ is the soil transported by wind.
- (vi) The final, terminal, stable community is called _____ .
- (vii) _____ water is the main source of water available for the roots of the plants.

2. Differentiate between the following (**any three**) : (3×5=15)

- (a) *In-situ* and *ex-situ* conservation
- (b) Food chain and Food web
- (c) Mor Humus and Mull Humus
- (d) National Parks and Sanctuaries
- (e) Analytical and Synthetic character

3. (a) What are ecosystem energetics ? Explain single-channel energy flow model in an ecosystem. (8)

(b) Give an account of vegetation of India. (7)

4. (a) What is EIA ? How does it help in conservation of the environment ? (8)

(b) Discuss any gaseous biogeochemical cycle along with a suitable diagram. (7)

5. (a) Define a population. Briefly discuss the characteristics of a population. (8)

(b) Give a sequential account of succession in a Xerosere. (7)

6. Write short notes on the following (**any three**) : (3×5=15)

(a) Soil Profile

(b) Project Tiger

(c) Ecological Pyramids

(d) Raunkiaer's life forms

(e) Mutualism

7. (a) Discuss various sources and effects of water pollution. (8)

(b) What is bioremediation ? Explain its types giving suitable examples. (7)