PG (NEW) CBCS M.Sc. Semester-III Examination, 2019 BOTANY

PAPER: BOT-303
(ECOLOGY & ENVIRONMENTAL BIOLOGY)

Full Marks: 40

Time: 2 Hours

Write the answer for each unit in separate sheet

UNIT I:

ECOLOGY

1. Answer any two questions of the following:

2×2=4

- a) Distinguish between habitat and niche.
- b) What is meant by reed swamp stage?
- c) What is food web? Mention its significance.
- d) Write down two anatomical adaptive features of the xerophytes.
- 2. Write short note on any two of the following

4×2=8

- a) Niche construction and differentiation.
- b) Ecological pyramids.
- c) Adaptations of halophytes.
- d) r and k selection.
- 3. Answer any one question of the following:

8×1=8

- a) Define ecological succession. With proper example schematically describe the facilitation model of succession. 2+6
- b) With example and illustrations describe the morpho-anatomical and physiological adaptions of the hydrophytes. 2+3+3

UNIT II:

ENVIRONMENTAL BIOLOGY

4. Answer any two questions of the following:

2×2=4

- a) Mention the three major causes of biodiversity loss in the world.
- b) Define carrying capacity.

(P.T.O)



c) What is meant by EIA?

d) What is a Ramsar site? Give example.

1+1

5. Write short notes on any two of the following

4×2=8

- a) In-situ conservation.
- b) Photochemical smog.
- c) Sustainable development.
- d) Earth Summit.

6. Answer any one question of the following:

8×1=8

- a) What does it mean by Bio-remediation? Describe the different approaches of phytoremediation with suitable examples. 2+6
- b) Write different causes of water pollution. Give a brief account on biological monitoring of water pollution. 4+4
