5/H-62 (vi) (Syllabus-2015)

2017

(October)

BOTANY

(Honours)

(Ecology and Conservation Biology)

(BOTH-502)

Marks: 56

Time: 3 hours

The figures in the margin indicate full marks for the questions

Answer Question No. 1 which is compulsory and four questions, selecting one from each Section

- 1. Write short notes on the following: 4×4=16
 - (a) Biomes and biosphere
 - (b) Survivorship curves
 - (c) Food chain
 - (d) Greenhouse effect

SECTION—I

- 2. What are ecological factors? Describe edaphic factors and their significances in plant distribution. 2+6+2=10
- 3. What are ecological adaptations? Describe the ecological adaptations of hydrophytes and give suitable diagram wherever necessary.

SECTION—II

- 4. Differentiate between primary succession and secondary succession. Discuss briefly the different stages of ecological succession in xeric conditions.
- 5. What are population interactions? Give a general account of the various types of population interactions in nature. 2+8=10

SECTION-III

- 6. Define ecological pyramids. Describe the pyramids of biomass and energy in a grassland ecosystem. 2+4+4=10
- 7. What do you understand by biogeochemical cycle? Give an account of phosphorus cycle in nature.

SECTION-IV

- 8. What are the sources of water pollution?

 Discuss in detail the effects and control measures of water pollution.

 3+4+3=10
- 9. Differentiate between ex situ and in situ conservations. Write a brief account of a 4+6=10 national park in India.

**