

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

**2018**

( 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) Light as an ecological factor
- (b) Protocooperation and competition
- (c) Pyramid of numbers
- (d) Magnitude of vascular plant diversity in  
India

( Turn Over )

( 2 )

SECTION—I

2. What are physiographic factors? Describe the significance of slope and aspect of a mountain in population distribution of plants.  $4+6=10$
3. Give a general account of the adaptations of xerophytic plants and draw suitable diagrams wherever necessary.  $6+4=10$

SECTION—II

4. Define ecological succession. Give an account of different stages of secondary succession in an ecosystem.  $2+8=10$
5. What are mortality and natality? Give an account of different types of survivorship curves.  $4+6=10$

SECTION—III

6. Describe the flow of energy in an ecosystem by 'box-and-pipe' model. 10
7. What are the structural attributes of an ecosystem? Give an account of abiotic components of a terrestrial ecosystem.  $2+8=10$

D9/120

( Continued )

( 3 )

SECTION—IV

8. What causes ozone layer depletion? Discuss the impact of ozone depletion on climate change and state some remedial measures to abate its impact.  $2+4+4=10$
9. What are biosphere reserves? How do they differ from national parks? Discuss various zones of a biosphere reserve and the levels of human activities in each zone.  $2+2+6=10$

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D9—1400/120

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