

M.Sc. 3rd Semester Examination, 2018

BOTANY

PAPER – BOT-303

Full Marks : 40

Time : 2 hours

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

UNIT – I

(Ecology)

1. Comment on the following (any two) : 2 × 2
- (a) Deep ecology
 - (b) Ecological Niche
 - (c) Carrying Capacity
 - (d) Climax concept.

(Turn Over)

(2)

2. Write short notes on any *two* of the following : 4 × 2
- (i) Primary production
 - (ii) Ecological pyramids
 - (iii) Mangroves
 - (iv) Sustainable development.
3. Answer any *one* of the following : 8 × 1
- (a) Define population. Mention the different attributes of population. Comment on r-strategy and k-strategy. 2 + 2 + (2 + 2)
 - (b) Define aquatic (wetland) environment. Write the commonly prevalent environmental stresses present in aquatic habitats. Discuss any two biochemical adaptations of aquatic plants. 3 + 2 + 3

UNIT – II

(*Environmental Biology*)

4. Comment on the following (any *two*) : 2 × 2
- (a) Photochemical smog

(3)

- (b) Deforestation
- (c) Silent spring
- (d) Eucalyptus controversy.

5. Write short notes on any *two* of the following :

- (i) Acid precipitation 4 × 2
- (ii) Invasive species
- (iii) Chipko movement
- (iv) Bioremediation.

6. Answer any *one* of the following : 8 × 1

- (a) Define biodiversity. Discuss the role of Ramsar site in conservation of biodiversity. 3 + 5
 - (b) What is ozone hole ? Depict Chapman cycle. Write the harmful effects of ozone depletion on human health. 2 + 3 + 3
-