

2008

**M.Sc. Part-II Examination****BOTANY****PAPER—IX**

Full Marks : 80

Time : 3 Hours

*The figures in the margin indicate full marks.*

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

*Illustrate the answers wherever necessary.*

*Write the answer to questions of each Half in separate books.*

**First Half**

[Marks—50]

Answer question No. 1 and any two from the rest.

1. Write short notes on (any five) : 4×5
  - (a) Shifting cultivation ;
  - (b) Ecologies efficiency ;
  - (c) Silent Valley movement ;
  - (d) Mangrove ;
  - (e) CFC<sub>s</sub>;
  - (f) Greenhouse effect ;
  - (g) Sanctuary ;
  - (h) Environmental education.
  
2. Define Watershed. Enumerate different types of soil erosion by rain. Discuss the role of green plants in conservation of soil. 2+3+10

(Turn Over)

3. What is acid precipitation ? Discuss the harmful effects of acid rain on aquatic eco-systems and forests. 2+(6+6)
4. Define wetlands. Why wetlands are regarded as nature's kidney. Discuss the biochemical adaptations of wetland plants. 2+4+9

### Second Half

[Marks—30]

5. What do you mean by pathogenesis ? Write a brief note on the mechanism of toxin's action in pathogenesis. 1+7

Or

Briefly describe the structural defence mechanism in plants. 8

6. Write the casual organism, symptoms and the control of root rot disease of Khair. 1+3+4

Or

Give an account of the spike disease of sandalwood and its control. 6+2

7. (i) Why VAM is called AM ?  
 (ii) Why artificial inoculation of VAM is difficult ?  
 (iii) Give an account of artificial inoculation of ectomyorrhiza in the nursery mentioning their limitations. 2+2+4

Or

5+3

- (iv) Write the procedure of VAM inoculum production.  
 (v) Write the names of the plant which form (i) only vam, (ii) only ectomyorrhiza and (iii) both ecto and endo myorrhiza type of associations.

8. Write short notes on any *two* of the following : 3×2
- (a) Biological control ;  
 (b) Plant quarantine ;  
 (c) Host parasite interaction and  
 (iv) Physiological disease of Sissoo.