

M.Sc. 3rd Semester Examination, 2011

BOTANY

PAPER – BOT- 303(Old XV)

Full Marks : 40

Time : 2 hours

Answer **all** questions

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

1. Comment on the following (any five) : 1 x 5

- (a) Deep ecology
- (b) Chapman cycle
- (c) *Silent Spring*
- (d) Ramsar convention
- (e) Environmental stress.

- (f) Energy flow
- (g) Metabolic poisons and
- (h) Biological invasion.

2. Write notes on any *two* of the following: $2\frac{1}{2} \times 2$

- (i) Climax concept
- (ii) *Eucalyptus* debate
- (iii) Food chain
- (iv) Xerophytes.

3. Answer any *three* of the following :

- (a) What is shifting cultivation? Write the different steps involved in it. Point out the harmful effects of this method on ecosystems. $2 + 4 + 4$
- (b) Define Wetlands. Comment on the role of wetlands in environmental purification and ground water recharge. $2 + (6 + 2)$

- (c) What is ozone depletion? Mention the factors leading to ozone hole formation. Comment on the harmful effects of ozone loss on human health. 2 + 4 + 4
- (d) Define biodiversity. Mention the reasons for biodiversity loss. Write the major steps involved in conservation of Indian biodiversity. 2 + 3 + 5
- (e) Write short notes on any *two* of the following : 5 + 5
- (i) Silent Valley Movement
 - (ii) Adaptation of mangroves
 - (iii) World Environment Day.
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