

**2015**

**M.Sc.**

**3rd Semester Examination**

**BOTANY**

**PAPER—BOT-303**

*Full Marks : 40*

*Time : 2 Hours*

*The figures in the right-hand margin indicate full marks.*

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

*Illustrate the answers wherever necessary.*

*Answer Q. No. 1 and any three of the rest.*

**1. Comment on any five of the following : 5×2**

- (i) Edge effect ;
- (ii) *Silent Spring* ;
- (iii) Greenhouse gases ;
- (iv) Climax concept ;

*(Turn Over)*

- (v) *Ex-situ* conservation ;
- (vi) Ramsar convention ;
- (vii) National park ;
- (viii) SAM mode of photosynthesis.

2. Depict the various steps of shifting cultivation. Comment on the harmful effects of shortened jhum cycle on environment. 5+5
3. What is ozone hole ? What is O<sub>3</sub> hole is restricted in polar regions ? Write the role of CFCs in ozone depletion. 3+4+3
4. Define mangroves. Discuss the various physiological adaptation in mangrove plants. 3+7
5. Define Wetlands. Discuss the various role of wetlands in water purification and biodiversity protection. 2+(4+4)
6. Write short notes any *two* of the following : 5×2
  - (a) Grazing Food Web ;
  - (b) Salient Valley Movement ;
  - (c) *Ecological niche* ;
  - (d) Invasive species and biodiversity loss.