- Discuss the importance of biodiversity for Human survival. Critically analyze the biodiversity conservation efforts that were taken in India with suitable examples. (15)
- What is the IUCN Red List? What is its importance? Discuss different criteria that have been taken into account to enlist species among various categories. (15)

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper: 4327

G

Unique Paper Code

: 32181501

Name of the Paper

: Biodiversity & Conservation

Name of the Course

: B.Sc. (H) Environmental

Sciences-Core

Semester

: V

Duration: 3 Hours

Maximum Marks: 75

Instructions for Candidates

- Write your Roll No. on the top immediately on recei of this question paper.
- Attempt any five questions.
- All questions carry equal marks.
- (a) Write the definition of the following (Any five): $(2 \times 5 = 10)$
 - (i) Umbrella species
 - (ii) Eco-regions
 - (iii) Cryopreservation

- (iv) Speciation
- (v) Seed Bank
- (vi) Protected area
- (b) Fill in the blanks:

 $(1 \times 5 = 5)$

- (i) Apiko movement was originated in ______ district of _____ state in India.
- (ii) Indian Himalaya extends in _____ states of India.
- (iii) ______ is a species of monkey endemic to the _____.
- (iv) India State of Forest Report (ISFR) is published by _____.
- (v) _____ is an UNESCO Natural Heritage Site in India.
- 2. Write Short notes:

 $(5 \times 3 = 15)$

- (i) Convention on Biological Diversity
- (ii) Agri-biodiversity
- (iii) Silent Valley movement

- 3. Write down the difference between the following: $(5\times3=15)$
 - (i) Phytogeographic zone and Zoogeographic zone
 - (ii) Spatial Pattern of Biodiversity and Temporal Pattern of Biodiversity
 - (iii) RFLP and AFLP
- 4. What is mass extinction? According to various reports, Earth is experiencing a sixth mass extinction. What are the factors responsible for such an unprecedented loss of biodiversity? Elaborate on the impact of this on humans and the environment. (15)
- 5. (a) What is ecological restoration? Why is it important to restore the ecosystem? How ecosystem restoration is different from ecosystem preservation. (8)
 - (b) Discuss various strategies for ecological restoration with suitable case studies. (7)
- 6. (a) What do you mean by species diversity? Does species diversity follow any patterns? Discuss various methods of biodiversity estimation. (10)
 - (b) What is the biodiversity Index, and what does it indicate? (5)

P.T.O.