Reg. No ....   Name ....

M. Sc DEGREE END SEMESTER EXAMINATION - OCTOBER 2019
SEMESTER 3 : ENVIRONMENTAL SCIENCE
COURSE : 16P3EVST11 : BIODIVERSITY, CONSERVATION AND SOCIAL ISSUES
(For Regular - 2018 Admission and Supplementary - 2016/2017 Admissions)

Time : Three Hours   Max. Marks: 75

Section A
Answer any 10 (2 marks each)

1. Name any four endemic species of India.
2. Define Species richness and Species abundance.
3. Mention the criteria for designating an area as biodiversity hotspot.
4. What is travel cost method?
5. Indicate the utility of Jaccard index?
6. What do you mean by 'edge effect'?
7. Enumerate the functions of State Board of Biodiversity?
8. Write a short note on 'Participatory Forest Management'.
9. What are 'GI tags'?
10. Briefly explain 'Environmental ethics'?
11. Indicate the necessity of rain water harvesting?
12. Mention the countries that constribute most to greenhouse emissions and in turn global warming.

(2 x 10 = 20)

Section B
Answer any 5 (5 marks each)

13. Give the IUCN categorization of species according to conservation status.
14. Explain the Stated preference method in ecosystem valuation.
15. Calculate alpha, beta and gamma diversity for the following ecosystem.

Species	Field A	Field B	Field C
Lemna	*		*
Eichhornia	*	*	
Pistia	*	*	
Salvinia		*	
Azolla			*
Hydrilla			*

16. Discuss the reclamation processes in a wetland ecosystem.
17. Describe the various *In-situ* conservation methods.
18. Describe the various zones in a biosphere reserve.
19. What role does ecotourism play in the arena of ecology, environment and local community?
20. Explain the importance of ozone layer.

Section C
Answer any 2 (15 marks each)

21. How do you evaluate 'Ecosystem services'? Explain.

22. Describe in detail the various habitat restoration strategies implemented in a wild life sanctuary.

23. Write an essay on wildlife management with special reference to India.

24. Do global warming and climate change represent a serious threat to our welfare and environment? Discuss.

(15 x 2 = 30)