M. Sc DEGREE END SEMESTER EXAMINATION - OCT/NOV 2020: JAN 2021
SEMESTER 3 : ENVIRONMENTAL SCIENCE
COURSE : **16P3EVST11 : BIODIVERSITY, CONSERVATION AND SOCIAL ISSUES**
(For Regular - 2019 Admission and Supplementary - 2016/2017/2018 Admissions)

Time : Three Hours   Max. Marks: 75

PART A
Answer any 10 (2 marks each)

1.   Define alpha and beta diversity.
2.   Define genetic diversity.
3.   Mention the criteria for designating an area as biodiversity hotspot.
4.   What is Sorensen's similarity index? Mention the method of calculation.
5.   Indicate the utility of Jaccard index?
6.   Mention the two mechanisms by which community structure affects the stability of a community.
7.   Describe the term GEF.
8.   List the advantages of *in-vitro* germplasm conservation.
9.   What is meant by germplasm?
10. List any four problems in urban areas.
11. What are the components of rain water harvesting system?
12. Mention any three methods of rain water harvesting.

(2 x 10 = 20)

PART B
Answer any 5 (5 marks each)

13. Give the IUCN categorization of species according to conservation status.
14. Explain any two biodiversity indices.
15. How is ecosystem valuation attempted through revealed preference method?
16. Write a note on succession in community.
17. Briefly describe Convention on Biological Diversity.
18. Briefly describe the various policies and programmes being implemented for wild life protection.
19. Describe Absorption pit method with suitable diagram.
20. Discuss on the issue of consumerism and waste products.

(5 x 5 = 25)

PART C
Answer any 2 (15 marks each)

21. How do you evaluate 'Ecosystem services'? Explain.
22. Explain habitat conservation methods.
23. Describe *in-situ* conservation strategy adopted for biodiversity conservation.
24. What is acid rain? Describe its causes, effects and solutions.

(15 x 2 = 30)