

B.Sc 5th Semester (Honours) Examination, 2021

ENVIRONMENTAL SCIENCE

Course ID: 51811

Course Code: SH/ENV/501/C-11

Course Title: Biodiversity & Conservation

Time: 1 hr. 15 min.

Full Marks: 25

The figures in the right hand side margin indicate marks.

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

- 1. Answer any *five* questions from the following:** **1 x 5= 5**
 - a. What do you mean by Gamma diversity?
 - b. Mention the significance of Red data book.
 - c. What are invasive species?
 - d. Define *Ex-situ* conservation.
 - e. Why Herbal drugs are safer over synthetic drugs?
 - f. How can you define speciation?
 - g. Mention two ways of pest control.
 - h. Differentiate National park from Wild life Sanctuaries.

- 2. Answer any *two* questions from the following:** **5 x 2= 10**
 - a. Write a brief note on IUCN Red list categorization. What do you mean by Biological hotspots? (4+1=5)
 - b. Discuss in short about National Biodiversity action plan. What are phytogeographic zones? (4+1=5)
 - c. Differentiate habitat degradation from habitat fragmentation. What are various consequences of Biodiversity loss? (2+3=5)
 - d. Mention seasonal fluctuations in Biodiversity patterns. What is the significance of seeds and seedlings bank? (3+2=5)

- 3. Answer any *one* question from the following:** **10 x 1= 10**
 - a. Discuss the role of remote sensing in management of natural resources. Add a note on quantitative methods of Biodiversity estimation. (5+5=10)
 - b. Write in details about the economic value of medicinal plants. What is the need of conservation of biological species? Differentiate afforestation from deforestation. (4+4+2=10)