

B.Sc. Semester-V Examination, 2022-23**ENVIRONMENTAL SCIENCE [Honours]**

Course ID : 51812 Course Code : SH/ENV/502/C-12

Course Title : Organismal and Evolutionary Biology

Time : 1 Hour 15 Minutes Full Marks : 25

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*1. Answer any **five** of the following questions:

1×5=5

- Define Gene pool.
- What is cytoplasm?
- Write two importances of Mendelism.
- What is paleontology?
- What is gene frequency?
- What are the factors of mutation?
- Define variation.
- What is death rate?

2. Answer any **two** of the following questions:

5×2=10

- What is the concept of Oparin-Haldane hypothesis? Write on the study of Miller. 2+3
- Discuss on migration and genetic drift. 3+2
- What is the concept of co-evolution? What is Hardy-Weinberg Law? 2+3
- Write on origins of unicellular and multi-cellular organisms. What is the evolutionary synthesis? 3+2

3. Answer any **one** of the following questions:

10×1=10

- What is evolution? Why Darwin's evolutionary theory is important in environmental perspective? 2+8
- What is evolutionary time scale? What are the importances in the Evolutionary time scale? 5+5
