

FIVE YEAR INTEGRATED M.Sc. EXAMINATIONS 2024

SEMESTER VII

Paper LS-4-7-5

(Evolution)

Time: Three Hours

Full Marks: 40

Questions are of values as indicated in the margin

(Answer Question No 1 and any three from the rest)

1. Write short notes on **any five** of the following-
 - (a) The RNA world Hypothesis
 - (b) Neo-Darwinism
 - (c) Gene pool
 - (d) Archeopteryx
 - (e) Neutral theory of evolution
 - (f) Adaptive Radiation

5×2 =10
2. Describe Darwin's theory of natural selection. Discuss the major determinants of Natural Selection.

5+5
3. What is Geological Time Scale? Discuss briefly the major divisions of Geological Time scale. Which period of Geological Time Scale is known as 'Age of mammals'?"

2+6+2
4. What is Molecular clock? Give at least two examples of re-known molecular clocks in animals. Mention at least two deviations of Molecular clock.

2+(3+3) +2
5. Discuss Hardy-Weinberg Equilibrium. Explain the applications of Hardy-Weinberg Equilibrium. What are the limitations of Hardy-Weinberg Equilibrium?

4+3+3
6. Write short notes on **any two** of the following
 - (a) Inbreeding
 - (b) Genetic drift
 - (c) Bottleneck effect
 - (d) Founder's effect

5+5 =10