

2022
B.A./B.Sc.
Sixth Semester
CORE – 14
ZOOLOGY
Course Code: ZOC 6.21
(Evolutionary Biology)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Give a detailed account on the different evidence of evolution. 14
2. Explain Darwin theory of evolution. Add a note on the sources of variation and their role in evolution. 8+6=14

UNIT-II

3. Explain Hardy-Weinberg law. What are the factors influencing Hardy-Weinberg equilibrium? 7+7=14
4. Write notes on the following: 7×2=14
 - (a) Concept of fitness
 - (b) Role of migration and mutation in changing allele frequencies

UNIT-III

5. What is isolating mechanism? Explain the types of isolating mechanism. 14
6. Write a note on the following: 7×2=14
 - (a) Darwin finches
 - (b) Clines

UNIT-IV

7. Give a detailed account on the unique hominin characteristics contrasted with primate characteristics. 14
8. Explain the primate phylogeny from Dryopithecus leading to Homo sapiens. 14

UNIT-V

9. With illustration explain the relatedness of species in a phylogenetic tree. 14
 10. Explain the rooted and unrooted phylogenetic tree. 14
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