



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 6th Semester Examination, 2021



ZOOACOR14T-ZOOLOGY (CC14)

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.*

1. Answer any eight questions from the following:

2×8 = 16

- What do you mean by RNA world hypothesis?
- What is hot dilute soup?
- What are the factors that disrupt H-W equilibrium?
- What is Darwinian fitness?
- What is blending hypothesis of inheritance?
- Name the various periods of Palaeozoic era.
- What is 'founder effect'?
- What are the effects of a genetic drift?
- What is radioactive clock method?
- In which periods birds and amphibians originated?
- State ~~two~~ post mating isolating mechanism.
- What is gene pool?
- What is stabilizing selection?
- Who are Cro-magnons?

2. Answer any three questions from the following:

3×3 = 9

- How can you determine the age of fossils by radioactive carbon method? What are the drawbacks of this method?
- Distinguish between man and ape.
- Define Darwinian fitness and selection coefficient.
- What is genetic drift? What are the consequences of genetic drift?
- What is the basic principle of a molecular clock?
- Write a short note on the types of fossils.

3. Answer any **three** questions from the following:
- | | |
|---|-------------------------------|
| (a) Define biological species. Discuss the drawbacks of biological species concept. | 5×3 = 15 |
| (b) Describe the processes of allopatric and sympatric speciation with examples. What is cline? | 1+4 |
| (c) Name the divisions of the coenozoic era. What is the importance of this era? | 4+1 |
| (d) How does a vertebrate globin gene prove evolution? | 3+2 |
| (e) Describe disrupting and directional selection with examples. | 5 |
| (f) Write short notes on founder effect and population bottleneck with examples. | $2\frac{1}{2} + 2\frac{1}{2}$ |
| | $2\frac{1}{2} + 2\frac{1}{2}$ |

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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