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

(a) What do you mean by RNA world hypothesis?

(b) What is hot dilute soup?

(c) What are the factors that disrupt H-W equilibrium?

(d) What is Darwinian fitness?

(e) What is blending hypothesis of inheritance?

(f) Name the various periods of Palaeozoic era.

(g) What is 'founder effect'?

(h) What are the effects of a genetic drift?

(i) What is radioactive clock method?

(j) In which periods birds and amphibians originated?

(k) State ~~two~~ post mating isolating mechanism.

(l) What is gene pool?

(m) What is stabilizing selection?

(n) Who are Cro-magnons?

2. Answer any ***three*** questions from the following: 3×3 = 9

(a) How can you determine the age of fossils by radioactive carbon method? What are the drawbacks of this method?

(b) Distinguish between man and ape.

(c) Define Darwinian fitness and selection coefficient.

(d) What is genetic drift? What are the consequences of genetic drift?

(e) What ~~is~~ the basic principle of a molecular clock?

(f) Write a short note on the types of fossils.

3. Answer any ***three*** questions from the following: $5\times3 = 15$

(a) Define biological species. Discuss the drawbacks of biological species concept. 1+4

(b) Describe the processes of allopatric and sympatric speciation with examples. What is cline? 4+1

(c) Name the divisions of the coenozoic era. What is the importance of this era? 3+2

(d) How does a vertebrate globin gene prove evolution? 5

(e) Describe disrupting and directional selection with examples. $2\frac{1}{2}+2\frac{1}{2}$

(f) Write short notes on founder effect and population bottleneck with examples. $2\frac{1}{2}+2\frac{1}{2}$

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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