

Reg No	:	
Name	:	

### **BSc DEGREE (CBCS ) EXAMINATION, FEBRUARY 2021**

### **Fifth Semester**

## Core Course - ZY5CRT07 - EVOLUTION, ETHOLOGY & ZOOGEOGRAPHY

B.Sc Biological Techniques and Specimen Preparation Model III ,B.Sc Zoology and Industrial Microbiology Model III Double Main ,B.Sc Zoology Model I ,B.Sc Zoology Model II Aquaculture ,B.Sc Zoology Model II Medical Microbiology,

2017 Admission Onwards

B6B76DE4

Time: 3 Hours

Part A

## Answer any **ten** questions. Each question carries **1** mark.

- 1. Give an example supporting the theory of spontaneous generation.
- 2. Cite an example for homologous organ.
- 3. What is carbon dating?
- 4. Which was the experiment conducted by Weismann to disprove inheritance of acquired characters?
- 5. Name the scientist who proposed the Biological species concept.
- 6. Define megaevolution.
- 7. What is adaptive radiation?
- 8. What is insight learning?
- 9. What is eusociality?
- 10. What is promiscuity?
- 11. What is Disjunctive animal distribution?
- 12. Name the "island of relics"

(10×1=10)

Turn Over



Max. Marks : 60

#### Part B

### Answer any **six** questions.

### Each question carries 5 marks.

- 13. Write down the concept and the significance of Urey-Miller's experiment.
- 14. Summarize the main postulates of Lamarck.
- 15. Elaborate the effect of genetic drift on population.
- 16. Differentiate between allopatric and sympatric speciation.
- 17. Write a brief account on panctuated equilibrium.
- 18. Write a short account on ecology and behaviour.
- 19. Explain operent learning with skinner box experiment.
- 20. Comment on the faunal affinities existing between Palaearctic and Nearctic realms
- 21. Briefly explain the various threats faced by Western Ghats

(6×5=30)

#### Part C

# Answer any **two** questions. Each question carries **10** marks.

- 22. Elaborate on Neo Darwinian concept and its criticisms.
- 23. Define isolation. What are the different types of isolation mechanisms? Mention its significance in evolution.
- 24. What are pheromones? Explain various types of pheromones and their role in animal behaviour.
- 25. Write an essay on different types of island with special emphasis on its faunal characteristics

(2×10=20)