

QP CODE: 20100088	Reg No	:	•••••
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# BSc DEGREE (CBCS ) EXAMINATION, FEBRUARY 2020

### **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

CF1062C4

Time: 3 Hours Maximum Marks :60

#### Part A

Answer any ten questions.

Each question carries 1 mark.

- 1. Name the two cell organelles that are believed to be evolved according to endosymbiotic theory.
- 2. Expand LUCA.
- 3. Who proposed the theory of recapitulation?
- 4. Who proposed mutation theory?
- 5. What is allopatric speciation?
- 6. Define geographic isolation.
- 7. Which mass extinction is responsible for the extinction of dinosaurs?
- 8. Define ethology.
- 9. Give an example for alturism.
- 10. Define territoriality.



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- 11. What is the theory of Continental drift?
- 12. What is a Mega diversity nation?

 $(10 \times 1 = 10)$ 

#### Part B

Answer any six questions.

Each question carries 5 marks.

- 13. Define fossils. What are the different kinds of fossils?
- 14. Analyse the major criticisms of Lamarckism.
- 15. What is genetic drift? Add notes on Bottle neck effect and founder effect.
- 16. Define species. What are the major sub divisions of species.
- 17. Write notes on microevolution and megaevolution with examples.
- 18. Comment on human pheromones and their role in sexual behaviour.
- 19. Explain polygamy as a reproductive strategy.
- 20. Comment on the ecological barriers in animal distribution
- 21. Comment on the faunal affinities existing between Palaearctic and Nearctic realms

 $(6 \times 5 = 30)$ 

#### Part C

Answer any two questions.

Each question carries 10 marks.

- 22. Evaluate the various aspects of Darwinian theory of natural selection. Add notes on critical analysis of Darwinism.
- 23. Write an essay on evolution of horses.
- 24. Write an essay on learning.
- 25. Write an essay on the geographic limits, physical features and faunal distribution of Australian realm.

 $(2 \times 10 = 20)$ 



