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Reg. No. : ....

Name : .....

## Fourth Semester B.Sc. Degree (C.B.C.S.S. – OBE – Regular) Examination, April 2022 (2020 Admission) GENERAL AWARENESS COURSE IN LIFE SCIENCES (ZOOLOGY) AND COMPUTATIONAL BIOLOGY 4A13 ZCB : Evolution

Time : 3 Hours

Max. Marks: 40

#### PART – A

Write about **each** of the following in **2** or **3** sentences. **Each** question carries **1** mark.

- 1. Write an account on autogenesis.
- 2. What is apeman?
- 3. Write on C value paradox.
- 4. What is geological time scale ?
- 5. What is fossilization ?
- 6. What is endosymbiosis ?

## PART – B

Explain about **any six** of the following. **Each** question carries **2** marks. (6×2=12)

- 7. Write an account on kin selection.
- 8. What are the different species of primitive ape ?
- 9. Write on mitochondrial eve hypothesis.
- 10. What is germplasm theory ?
- 11. Comment on significance of Hardy Weinberg equilibrium.

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(6×1=6)

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12. Give a brief account on evolution of amphibians and mammals.

13. What is co-evolution ? Cite an example.

14. Comment on Neolamarkism.

### PART – C

Write short essay on **any four** of the following. Each question carries 3 marks.

(4×3=12)

15. Write short essay on Oparin and Haldane theory.

16. What is the contribution of Alfred Wallace to the theory of natural selection ?

17. Explain neodarwinism.

18. Differentiate between convergent and divergent evolution with an example.

19. What is fossil dating ? Write notes on its significance.

20. Differentiate between batesian and mullerian mimicry in the context of evolution.

#### PART – D

Write essay on any two of the following. Each question carries 5 marks.

 $(2 \times 5 = 10)$ 

21. Write an essay on isolation and isolating mechanisms. Comment on species concept and intraspecific categories.

22. Write an essay on the Lamarkism and Darwinism with comments on its criticisms.

23. Write an essay on the evidences of organic evolution.

24. Write an essay on the various theories on origin of life.