

2020

Gurudas College

ZOOLOGY – HONOURS

(1+1+1 Regulations)

PAPER 3 (UNIT 1)

Full Marks: 50

Time: 2 hrs.

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable

Answer **any twenty five** questions from the following:

2x25

1. Distinguish between lectotype and syntype.
2. Distinguish between deme and cline.
3. Give any 2 uses of the study of systematics.
4. What is Linnaean Hierarchy?
5. Distinguish between alpha and beta taxonomy.
6. What is sibling species?
7. What is holotype?
8. What is apomorphy and plesiomorphy?
9. Give any 2 differences between phenogram and cladogram.
10. Distinguish sympatric and allopatric speciation.
11. Distinguish between microtaxonomy and macrotaxonomy.
12. What is a polytypic species?
13. Distinguish between continuous and discontinuous variation.
14. What is 'hot dilute soup'?
15. What do you mean by Coacervates?
16. Distinguish between stabilizing and directional natural selection with examples.
17. State the Hardy –Weinberg law of equilibrium.
18. Distinguish between gene frequency and genotypic frequency.
19. What is founder effect?
20. What do you mean by population bottleneck?
21. Write one physiological and one anatomical adaptation of sloth bear.
22. Write two adaptations of Camel for water conservation.
23. What is Adaptive radiation?
24. Provide two scientific names each of mammalian and avian fauna of Nearctic and Neotropical realms.
25. State two important differences in the limb structure of ancestral and modern horses.
26. What do you mean by Bathymetric distribution?
27. What is waggle dance?
28. Explain reciprocal altruism?
29. Differentiate between latitudinal and longitudinal migration with example.
30. How sun helps the bird during migration?
31. What do you mean by tropism?
32. How do bats discriminate their own sound?
33. Write a note on imprinting.
34. What is fixed action pattern?
35. Write a note on Kin Selection.