

2020
Gurudas College
ZOOLOGY – HONOURS
(1+1+1 2016 Regulations)
PAPER I (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 25 of the following taking minimum 12 from each Group

2x25 = 50

Group A : NON-CHORDATE

1. What are Reticulopodia and Lobopodia?
2. State the systematic position (up to phylum) of the following protozoans –
 - a) *Paramecium*
 - b) *Plasmodium*
3. What are Basal Granules?
4. Define Conjugation.
5. Name two disadvantages of having asconoid canal system.
6. State the systematic positions (up to class) of the following animals –
 - a. *Pennatula* sp b. *Physalia* sp
7. Name the 4 medusae modifications.
8. Describe a fringing reef.
9. Give differences between bilateral and radial symmetry.
10. Differentiate between Schizocoely and Enterocoely.
11. Give 2 diagnostic features of Phylum Platyhelminthes.
12. What is clitellum?
13. What is Metamerism?
14. What is the role of Spiracles in insect respiration?
15. Explain the types of gills, depending on their origin and attachment, found in prawn.
16. Differentiate between commissure and connective, giving one example of each.
17. Give any 1 function of each of osphradium and statocyst of *Pila*.
18. Name any 2 parts of Water Vascular System of *Asterias* sp with their respective functions.

Group B : CHORDATE

19. State the systematic position (up to order) of the following animals –
 - a) *Rana*
 - b) *Hemidactylus*
20. Distinguish between aortic arches of birds and mammals.
21. What is ARO? Give example of two animals (with scientific names) where ARO is found.
22. Write the names of the chambers of ruminant stomach of cow.
23. Define Paedomorphosis with example.
24. State two unique features of Ascidian metamorphosis.
25. Name the different types of fangs of snakes with one snake for example from each.
26. What is the function of Capito Mandibularis Superficialis muscle?
27. What are Ratites and Carinates? Give example of both.
28. Define Down Feathers.
29. Distinguish between Rectrices and Remiges.
30. Differentiate between Artiodactyla and Perisodactyla (stating at least two points and one example from each).
31. State two colouration variations of avian feathers and their functions.
32. State two distinguishing features of Cetacea and Sirenia?
33. State two differences between Horns and Antlers.
34. What is Prong Horn? Where is it found?
35. State two functions of mammalian hair.