

**2020**  
**Gurudas College**  
**ZOOLOGY – HONOURS**  
**(1+1+1 2010 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

2x25 = 50

1. What is Kinetin?
2. State the phylum of the following protozoans –
  - a) *Paramecium*
  - b) *Plasmodium*
  - c) *Euglena*
  - d) *Myxobolus*
3. What are Reticulopodia and Lobopodia?
4. What are Basal Granules?
5. Define Conjugation.
6. Give any 2 diagnostic features of Phylum Porifera
7. Name two disadvantages of having asconoid canal system.
8. State the systematic positions (up to class) of the following animals –
  - a. *Pennatula* sp
  - b. *Physalia* sp
9. Name the 4 medusae modifications.
10. What is Darwin-Dana subsidence theory of coral reef formation?
11. Describe a fringing reef.
12. Give differences between bilateral and radial symmetry.
13. Differentiate between Schizocoely and Enterocoely.
14. Give the definition of pseudocoelom.
15. Write at least four features of coelom.
16. Give 2 diagnostic features of Phylum Platyhelminthes.
17. State the systematic positions (up to class) of the following animals –
  - a. *Tubifex* sp
  - b. *Hirudinaria* sp
18. State the systematic positions (up to class) of the following animals –
  - a. *Periplaneta* sp
  - b. *Macrobrachium* sp
19. Mention at least four characters of class Oligochaeta.
20. What is clitellum?

21. What is Scaphognathite? State its function.
22. Define Phyllobranch Gills. Give example.
23. What is the role of Spiracles in insect respiration?
24. Explain the types of gills, depending on their origin and attachment, found in prawn.
25. Show the course of blood flow through the gill of prawn with the help of a flowchart.
26. Give any 2 diagnostic features of Phylum Mollusca
27. Differentiate between commissure and connective, giving one example of each.
28. Give any 1 function each of osphradium and statocyst of *Pila*
29. State the systematic positions (up to class) of the following animals –
  - c. *Antedon* sp
  - b. *Cucumaria* sp
30. Match the following to their larvae
  - A. Crinozoa
  - B. Asteroidea
  - C. Holothuroidea
  - D. Ophiuroidea
  - i. Auricularia
  - ii. Ophiopluteus
  - iii. Bipinnaria
  - iv. Doliolaria
31. Name any 2 parts of WVS of *Asterias* sp and state their respective functions.
32. Define coelomocyte of the WVS of Echinoderms, and give any 2 of its function.
33. Why hemichordates are called so? Mention the chordate features of *Ballanoglossus* sp.
34. What is stomochord?
35. State two anatomical peculiarities of *Limulus*.