

Kishore Bharati Bhagini Nivedita College (Co-Ed.)
(Affiliated to the University of Calcutta)

2020

ZOOLOGY – HONOURS

Paper : CC-4 (Cell Biology)

Full Marks : 50

Time : 2 Hrs.

The figures in the margin indicates full marks.

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

Send PDF of the Answer Script to **kbbnczoology@gmail.com**

Answer any **twenty five (25)** questions from the following:

2×25

1. What is the basic composition of plasma membrane?
2. Write down the components of GERL system.
3. What is the role of COP protein?
4. Chemiosmotic hypothesis applicable for which organelle?
5. Write down the full form of SER and RER.
6. Write down the full form of NPC.
7. Differentiate between euchromatin and heterochromatin?
8. In which part of chromosome Kinetochore is situated?
9. Write down the names of the 3 types of cytoskeleton.
10. Write down the names of the subunit/s of microfilament.
11. Lysosome consists which type enzyme?
12. What is glycoprotein?
13. Differentiate between active and passive transport?
14. Write down the names of two different faces of Golgi apparatus.
15. Describe the role of lysosome.
16. Describe the role of microtubule.
17. Describe the role of RAN protein.
18. What is the role of Golgi body?
19. Name any two SNARE protein.
20. What do you mean by SAM and OXA?

21. Exactly which subunit of F_0F_1 particle produces ATP?
22. What is the role of SER?
23. Mention two functions of check points in the eukaryotic cell cycle.
24. What do you mean by "loss of contact inhibition of malignant cell"?
25. Distinguish between carcinoma and sarcoma.
26. What is retrovirus? Give an example.
27. Distinguish between apoptosis and necrosis.
28. Distinguish between v-onc and c-onc.
29. What are MPF? Write its function.
30. How Rb protein control mammalian G1-S transition?
31. What is angiogenesis?
32. What is Cdc28? What is its main function?
33. Draw the flow diagram of RAS pathway of signal transduction.
34. Which checkpoint in cell cycle is regulated by p53 and how?
35. What is metastasis?
