

2020

Gurudas College

ZOOLOGY – HONOURS

(1+1+1 2010 Regulations)

PAPER II (UNIT I)

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. What are pentose and hexose?
2. What is the common formula of amino acid?
3. How many ATP molecules are formed during complete oxidation of one molecule of glucose under aerobic respiration?
4. Distinguish between saturated and unsaturated fatty acid.
5. Differentiate between glycogenesis and gluconeogenesis.
6. State the biological role of protein.
7. What do you mean by β oxidation of fatty acid?
8. Write a note on oxidative deamination.
9. What is prosthetic group?
10. Define iso-enzyme and holoenzyme.
11. Write the action of pH on enzyme activity.
12. What do you mean by synthetases and oxydo-reductases?
13. What is induced fit model?
14. Write a note on Haldane effect.
15. What is chloride shift?
16. How many pyrrole rings are present in a haemoglobin molecule?
17. Write the compositions of haemoglobin molecule.
18. Who are euryhaline and stenohaline animals?
19. Describe the role of chloride cells in osmoregulation.
20. Write a note on anadromous and catadromous fish.
21. Why birds and reptiles excrete uric acid?
22. What is Bowman's capsule?
23. In which part of the nephron reabsorption is occurred?
24. What is Henle's loop?
25. Write note on Ornithine cycle.
26. What do you mean by saltatory nerve impulse propagation?
27. What is all or none law?
28. Define action potential.
29. Mention the value of resting membrane potential.
30. What are axosomatic and axodendritic synapse?
31. Write the role of hypothalamus in thermoregulation.
32. What is non-shivering thermogenesis?
33. Mention the role of retina of the eye.
34. What is cochlea?
35. Write the names of the bones of the middle ear.