TB245993L

Reg. No :.....

Name :.....

BACHELOR'S DEGREE (C.B.C.S.) EXAMINATION, FEBRUARY 2024

2021 ADMISSIONS SUPPLEMENTARY (SAY)

SEMESTER V - CORE COURSE (ZOOLOGY)

ZY5B08B18 - Human Physiology, Biochemistry and Endocrinology

Time : 3 Hours **Maximum Marks : 60**

Part A

I. Answer any Ten questions. Each question carries 1 mark **(10x1=10)**

1. Define antioxidants. Give an example.
2. Name the following a) Universal Antioxidant b) Suicidal Antioxidant.
3. Write briefly on ESR.
4. Name any 2 respiratory pigments.
5. What is Nephritic syndrome? Give an eg.
6. How do you identify Parkinsons disease.
7. Define threshold potential?
8. Define an essential amino acid. Give an example.
9. Define the terms (a) Apoenzymes (b) Holo enzymes.
10. Define A) Gluconeogenesis B) Glycogenesis.
11. Classify hormones based on their action.
12. What is the role of pineal gland in hormone secretion?

Part B

II. Answer any Six questions. Each question carries 5 marks **(6x5=30)**

13. What are the different types of endogenous antioxidants?
14. Discuss the following a) Jaundice b) Thrombosis.
15. Explain A) Excitation contraction coupling B) Rigor mortis.
16. Comment on A) Simple muscle twitch B) Tetanus. Sketch and Label.
17. Elaborate on the different types of Polysaccharides.
18. With the help of a labelled diagram explain Glycogenesis. Add a note on how Glycogenolysis differ from Glycogenesis.
19. Write briefly on the derivatives of cholesterol.
20. Discuss the structure and secretions of Islets of Langerhans. Comment on the antagonistic action of insulin and glucagon.
21. Explain the mechanism of hormonal action.

Part C

III. Answer any Two questions. Each question carries 10 marks **(2x10=20)**

22. Explain Oxygen dissociation curve. Sketch and label. Add a note on the factors affecting Oxygen dissociation curve.
23. Explain in detail the gross and ultra structure of kidney and the types of nephrons.
24. Define Nerve impulse. Explain the mechanism of nerve impulse transmission. Sketch and label.
25. Describe Citric acid Cycle. Explain the energy yield during the oxidation of Glucose.