TM252402B

Reg. No :.....

Name :.....

P.G. Diploma (C.S.S) EXAMINATION, MARCH 2025

2020, 2021, 2022, 2023 ADMISSIONS SUPPLEMENTARY

SEMESTER II - CORE COURSE CLINICAL NUTRITION & DIETETICS

CN2C07TPGD20 - Nutritional Biochemistry

Time : 3 Hours

Maximum Weight : 30

Part A

I. Answer any Eight questions. Each question carries 1 weight (8x1=8)

1. Describe the significance and nature of enzymes.
2. Differentiate between a) lock and key mechanism and b) induced fit mechanism.
3. What is glycogen? Write a note on glycogenesis.
4. What is malate shuttle? Write its relevance.
5. What is carnitine? Explain its function.
6. Write the functions and metabolism of glycine.
7. What is exergonic reaction? Give a suitable example.
8. Write the differences between DNA and RNA.
9. What is pharmacodynamics?
10. What is entoxication? Give an example.

Part B

II. Answer any Six questions. Each question carries 2 weight (6x2=12)

11. What is enzyme inhibition? Write different types.
12. How are other hexoses converted to glucose?
13. Write about the formation of bile acid and its functions.
14. Write about the catabolic reactions of amino acids.
15. What is entropy and enthalpy? How are they related?
16. Write the salient features of DNA. Explain the synthesis of a new DNA strand.
17. Explain the benefits of minimizing drug-nutrient interactions in the body.
18. Define detoxification. Write about the reactions involved in phase II reactions.

Part C

III. Answer any Two questions. Each question carries 5 weight (2x5=10)

19. What is glycogenolysis? Write different types of enzyme specificity.
20. Write deamination of amino acids. Explain fatty liver, its causes and prevention.
21. Explain genetic code in detail. Describe the bonds in DNA which confer stability to its structure with the help of suitable diagrams.
22. Explain phase I mechanism of detoxification of xenobiotics.