

TM211800TR

Reg. No :

Name :

MASTER'S DEGREE (C.S.S.) EXAMINATION, NOVEMBER 2021
[2021 Admissions Regular and 2020 Admissions Improvement & Supplementary]
SEMESTER I - CORE COURSE (CLINICAL NUTRITION AND DIETETICS)
ND1C03TM20 - NUTRITIONAL BIOCHEMISTRY

Time : 3 Hours

Maximum Weight : 30

Part A

I. Answer any Eight questions. Each question carries 1 weight

(8x1=8)

1. Define the unit of the enzyme. Write the coenzyme action of pyridoxal phosphate.
2. Write on reaction specificity of enzymes.
3. Identify the biochemical changes occur in alcoholism.
4. Write about the metabolism of pyruvate and energetics.
5. Explain the transport of fatty acid into the mitochondria.
6. How is odd chain fatty acids degraded in the body?
7. Write the synthesis of emergency hormones in the body.
8. Comment on inhibitors of Purine synthesis.
9. Define Bioenergetics.
10. Explain briefly hydrolysis reaction in detoxification.

Part B

II. Answer any Six questions. Each question carries 2 weight

(6x2=12)

11. Classify enzymes and enzyme code numbers with suitable examples.
12. How is glucose produced from non-carbohydrate sources?
13. How is ribose sugar synthesized in the body?
14. Write about beta-oxidation of palmitic acid.
15. Write the metabolism of tyrosine and synthesis of melanin.
16. Define DNA replication. Write a note on different types of DNA replication.
17. Discuss on high energy compounds. Give examples.
18. Explain the salient features of cytochrome P450.

Part C

III. Answer any Two questions. Each question carries 5 weight

(2x5=10)

19. What is glycogenolysis? Explain the processes involved in the lowering of enzyme activation energy.
20. Explain about different types of oxidations fatty acids undergone.
21. Define oxidative deamination of amino acids. Elaborate on pyrimidine synthesis.
22. Explain in detail the metabolism of Xenobiotics.