QP CODE: 19002345

19002345

Reg No : .....

Name : .....

M.Sc. DEGREE (C.S.S) EXAMINATION, NOVEMBER 2019

First Semester

Faculty of Science

FOOD TECHNOLOGY AND QUALITY ASSURANCE

Core - FQ010102 - BASIC BIOCHEMISTRY

2019 Admission Onwards

432B12E4

Time: 3 Hours Maximum Weights :30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. Write a note on optical isomerism in monosaccharides
2. Carbohydrates are not digested in stomach - Give reason
3. Outline the significance of conversion of pyruvate to lactate
4. Differentiate between simple and mixed TAG
5. What are plasmologens?
6. All amino acids give purple colour with a reagent X except an amino acid Y which gives yellow colour.
   (1) Name X and Y (2) Explain the reaction.
7. Draw Lineweaver-Burk plot for an enzyme catalyzed reaction
8. What do you mean by suicidal inhibition? Give a suitable example
9. Draw the structure of ATP
10. Compare PS I and PS II

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. Explain in detail on the synthesis of glycogen from glucose
12. Give a detailed account of diagnosis, metabolic changes and management of diabetes mellitus

13. Describe the reactions of fatty acid synthase complex

14. Elucidate the reactions of urea cycle and its regulation

15. Enumerate the digestion and absorption of proteins in our body

16. Outline the salient features of an active site

17. With the help of diagrams, narrate the stages of elongation of peptide chain in translation

18. Enumerate in detail the reactions of photorespiration

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Elucidate the reactions of gluconeogenesis from pyruvate and lactate.

20. Enumerate the process of digestion and absorption of lipids in small intestine

21. Give a detailed account of DNA replication in prokaryotes and eukaryotes

22. Discuss in detail the light reactions of photosynthesis

(2×5=10 weightage)