

TM171520E

Reg. No:

Name:

M. Sc. DEGREE (C.S.S.) EXAMINATION, NOVEMBER 2017
SEMESTER I – HOME SCIENCE (FOOD SCIENCE AND NUTRITION)
(2017 Admission Regular, 2016 Admission Supplementary/Improvement &
2015 Admission Supplementary)
FN1C03TM - NUTRITIONAL BIOCHEMISTRY

Time: Three Hours

Maximum Marks: 75

PART A

I. Write short notes on any five questions. Each question carries 3 marks.

1. Glycogenolysis
2. -oxidation
3. Ketosis
4. Albinism
5. Plasmids
6. Differentiate DNA and RNA.
7. Coupled reactions in Energy transfer

(5x3=15)

PART B

II. Answer any six questions. Each question carries 5 marks.

8. Explain De novo synthesis of Fatty acids.
9. Give an outline of Glycolysis.
10. Explain the urea cycle.
11. What are antioxidants? Explain the term 'free radical scavenging'.
12. Explain types of hyperlipidemias.
13. Elaborate the role of high energy phosphates in energy metabolism.
14. Explain the process of DNA replication.
15. Write a note on structure of proteins.
16. Describe epimerism and optical isomerism with suitable examples.

(6x5=30)

PART C

III. Answer any two questions. Each question carries 15 marks.

17. Give an account of electron transport chain and oxidative phosphorylation.
18. Give an account of protein biosynthesis.
19. Discuss the mechanism of HMP shunt.
20. Discuss biosynthesis of cholesterol and regulatory mechanisms.

(2x15=30)