



QP CODE: 24027201



24027201

Reg No :

Name :

**B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE
EXAMINATIONS, OCTOBER 2024**

Third Semester

B.Sc Clinical Nutrition and Dietetics Model III

**COMPLEMENTARY COURSE - CN3CMT05 - BIOCHEMISTRY-NUTRITIONAL
BIOCHEMISTRY**

2017 Admission Onwards

72750114

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. Example of reducing sugar.
2. What is reducing disaccharides?
3. Glucose formation from lipids.
4. Give an account of HMG CoA.
5. List out the name of the phospholipids formed from triacylglycerol.
6. Regulation of fatty acid synthesis.
7. What is the product of oxidation of fatty acid with odd number of carbon atoms?
8. Give an account of interrelationship between triacylglycerol and phospholipids.
9. What is chromoprotein?
10. List out enzymes involved in ornithine cycle.
11. Give an account of interrelationship between carbohydrate and lipid metabolism.
12. Role of testosterone in protein metabolism.

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*





13. Give a brief account of digestion and absorption of dietary carbohydrate.
14. What is cori cycle?
15. Enzymes involved in TCA cycle.
16. Give a brief account of glycolysis and TCA cycle mentioning the steps and the energy yield per molecule of glucose.
17. Relationship between beta oxidation and ketolysis.
18. Degradation of ketone bodies.
19. Classification of amino acids based on nutritional requirement.
20. Initiation of protein biosynthesis.
21. Metabolic changes of fat during diabetes mellitus.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Explain pentose phosphate pathway.
23. Explain chemical and physiological classification of carbohydrates.
24. Explain digestion, absorption and transport of lipids.
25. Explain important reactions in amino acid metabolism.

(2×15=30)

