

(BC 4325)  
**B.Sc (MBC) Degree (CBCS) Examinations**

MARCH - 2019  
EXAMINATION AT THE END OF IV SEMESTER

PART-II  
**INTERMEDIARY METABOLISM**

TIME : Two and half hours

Maximum : 60 Marks

PART - A

Answer any FIVE of the following questions  
Each question carries FOUR marks

5 X 4M = 20M

1. Fate of pyruvate.
2. C4 pathway
3. Disorders of glycogen metabolism
4. Disorders of lipid metabolism
5. Define ketogenesis
6. Ketogenic amino acid and glucogenic amino acids
7. Inborn errors of aromatic amino acids
8. Regulation and synthesis of glutamine
9. Lesch-nyham syndrome
10. Catabolism of pyrimidines

PART -B

Answer ALL the following questions  
Each question carries 8 marks

5 X 8 M = 40 M

11. (a) Discuss about the glycogenesis and glycogenolysis?  
OR  
(b) Explain about the HMP shunt pathway?
12. (a) Discuss about the biosynthesis of cholesterol?  
OR  
(b). Write about biosynthesis and degradation of triacylglycerol?
13. (a) Explain about the general reactions of amino acid metabolism?  
OR  
(b). Discuss about the urea cycle and its regulation?
14. (a). Discuss in detail about nitrogen cycle?  
OR  
(b). What is biological nitrogen fixation? Explain about nitrogenase enzyme system?
15. (a). Write an essay on biosynthesis and degradation of heme?  
OR  
(b). Discuss about the biosynthesis of purine nucleotides?