

THREE YEAR BSCS (CBCS) DEGREE EXAMINATION, APRIL 2017

FOURTH SEMESTER

Part II — Biochemistry

INTERMEDIARY METABOLISM

Time : 3 Hours

Max. Marks : 75

SECTION - A

Answer any FIVE questions. Each carries 5 marks.

(Marks : 5×5 marks = 25 marks)

1. Glycolytic pathway.
2. Citric acid cycle.
3. Biosynthesis of cholesterol.
4. Biosynthesis of creatine.
5. Nitrogenase system.
6. Glutamine syntheses.
7. Catabolism of Purines.
8. Biosynthesis of Heme.

SECTION - B

Answer ONE question from each Unit.

Each question carries 10 marks.

(Marks : 5×10 marks = 50 marks)

UNIT - I

9. Explain the mechanism of gluconeogenesis.

Or

10. Write a note on light reaction of photosynthesis.

UNIT - II

11. Give an account on elongation of fatty acids in mitochondria and microsomes.

Or

12. Explain the mechanism of biosynthesis and degradation of triacylglycerol?

UNIT - III

13. Write a note on any two general reactions of aminoacid metabolism.

Or

14. Describe urea cycle and its regulation.

UNIT - IV

15. Describe the mechanism of biological nitrogen fixation.

Or

16. Write a note on nitrogen cycle.

UNIT - V

17. Write a note on biosynthesis of purines and pyrimidines.

Or

18. Explain about disorders of nucleotide metabolism.
