





B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, MAY 2024

Fourth Semester

 ${\bf Complementary\ Course-BIO\ CHEMISTRY-METABOLISM\ II}$

(Common for all programmes having Bio Chemistry as a complementary subject)

[2013 to 2016 Admissions]

Time: Three Hours Maximum: 60 Marks

Part A (Short Answer Questions)

Answer all questions.
Each question carries 1 mark.

Write a note on:

- 1. Keratomalacia.
- 2. HMG CoA reductase.
- 3. Snurps.
- 4. Feminism.
- 5. Ketone bodies.
- 6. Codon assignment.
- 7. Active principle in lemon peel
- 8. Antisterility factor.

 $(8\times 1=8)$

Part B (Brief Answer Questions)

Answer any **six** questions. Each question carries 2 marks.

Write an account on:

- 9. Alkaptonuria.
- 10. Biosynthesis of methionine.
- 11. Symptoms of Beriberi.

Turn over





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- 12. Sources of Vitamin B12.
- 13. PABA.
- 14. Structure of Phospholipid.
- 15. Structured components of DNA.
- 16. Water soluble vitamins.
- 17. Biosynthesis site of epinephrine.
- 18. rho-dependent termination.

 $(6 \times 2 = 12)$

Part C (Short Essays)

Answer any **four** questions.

Each question carries 4 marks.

- 19. Explain the feed back regulation of amino acid biosynthesis.
- 20. Compare fatty acid synthesis and degradation.
- 21. Give an account of proteolytic enzymes of gastro intestinal tract.
- 22. Describe urea cycle.
- 23. Give the structure and components of replication fork.
- 24. Discuss the chemical nature of gene.

 $(4 \times 4 = 16)$

Part D (Long Essays)

Answer any two questions.

Each question carries 12 marks.

- 25. Give the biological role and nutritional importance of minerals.
- 26. Explain different types of post translational modifications.
- 27. Write an essay on Nitrogen fixation.
- 28. Give a detailed account of β-oxidation with ATP yield.

 $(2 \times 12 = 24)$

