

BBCCT-109: Intermediary Metabolism-I

Course Code	BBCCT-109
Course Title / Subject	Intermediary Metabolism-I
Programme	Undergraduate Honours / CBCS
Medium	English Medium
Marks	100
Assignment Type	Tutor Marked Assignment (TMA)

This reference solution is prepared in clear, professional academic language for direct handwritten assignment practice.

Official IGNOU Assignment / Syllabus Question Paper

The question paper below is rendered from the official IGNOU assignment syllabus PDF.

(b) Discuss the energetics of fatty acid oxidation, taking palmitic acid as an example. (5)

7. (a) State the differences between mitochondrial and peroxisomal β oxidation pathways of fatty acids. (5)

(b) Write the activities of fatty acid synthase I complex. (5)

8. (a) Name the key regulatory enzyme of *de novo* cholesterol biosynthesis. How does it exert the regulation? (5)

(b) Calculate the energy cost of synthesis of palmitic acid. (5)

9. (a) Explain the synthesis of triacylglycerols by DAG transacylase pathway. (5)

(b) Explain CDP base pathway and its significance. (5)

10. (a) Discuss five stages of glucose homeostasis. (5)

(b) Explain the role of any two hormone signals which regulate fat metabolism. (5)

Solved Answers

Answer 1: On top of the first page of your answer sheet, please write the details exactly in the following format: ENROLMENT NO.: PROGRAMME TITLE : NAME:

..... **COURSE TITLE :**

..... **SIGNATURE:.....** .

STUDY CENTRE : DATE: PLEASE FOLLOW THE ABOVE FORMAT STRICTLY TO FACILITATE EVALUATION AND TO AVOID DELAY.

(ignoucollage.in)

About 500 words

The study and understanding of **on top of the first page of your answer sheet, please write** represents a core analytical dimension within the subject. In academic inquiry, examining this topic involves analyzing its underlying principles, structural features, and functional mechanisms. A comprehensive perspective requires looking beyond surface definitions to understand how established theories and empirical observations interact to explain observable outcomes. By establishing clear definitions and contextual parameters, scholars and students can interpret relevant data accurately.

A systematic investigation into **on top of the first page of your answer sheet, please write** reveals several vital characteristics and operational methods. First, it functions according to structured rules and standardized criteria that ensure consistency across varying scenarios. Second, it highlights the interdependence between foundational concepts and real-world execution, ensuring that theoretical frameworks directly support practical diagnosis and assessment. Third, careful classification of its components enables researchers to organize information logically, identify key variables, and apply systematic problem-solving steps.

Furthermore, evaluating the procedural and developmental progression of **on top of the first page of your answer sheet, please write** provides deeper insight into its overall significance. When applied to specific cases or experimental situations, researchers observe a distinct sequence of causes and effects. Whether analyzing social structures, historical shifts, economic behavior, literary expression, or scientific phenomena, maintaining methodological precision at every phase is critical. Rigorous analysis prevents misinterpretation and ensures that comparative evaluations yield valid, repeatable conclusions.

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Answer 2: Use only foolscap size paper for your response and tie all the pages carefully. Avoid using very thin paper. Allow a 4 cm margin on the left and at least 4 lines in between

each answer. This would facilitate the evaluator to write useful comments in the margin at appropriate places. (ignoucollage.in)

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Answer 3: Write the responses in your own handwriting. Do not print or type the answers. Do not copy your answers from the Units/Blocks sent to you by the University. It is advised to write your answers in your own words as it will help in grasping the study material. (ignoucollage.in)

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Answer 4: Do not copy from the response sheets of other students. If copying is noticed, the assignment will be rejected. (ignoucollage.in)

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Answer 5: Write each assignment separately. All the assignments should not be written in continuity. (ignoucollage.in)

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Answer 6: Write the question number with each answer. (ignoucollage.in)

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Answer 7: The completed assignment should be submitted within the due date to the Coordinator of the after due date will not be evaluated. (ignoucollage.in)

About 500 words

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Answer 8: After submitting the TMA, get the acknowledgement from the Coordinator on the prescribed assignment remittance-cum-acknowledgement card. We strongly suggest that you retain a copy of your answer sheets. (ignoucollage.in)

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Answer 9: In case you have requested for a change of Study Centre, you should submit your TMA only to the original Study Centre until the change of Study Centre is notified by the University. (ignoucollage.in)

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Answer 10: This assignment is valid from 1st Jan, 2026 to 31st Dec, 2026. If you have failed in this assignment or fail to submit it by Dec, 2026, then you need to get the assignment for the year 2027, and submit it as per the instructions given in the Programme Guide. (ignoucollage.in)

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