

Question Paper

Exam Date & Time: 14-Aug-2024 (10:00 AM - 12:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIFTH SEMESTER BSc. HEALTH SCIENCE DEGREE EXAMINATION - AUGUST 2024
SUBJECT: BHS-301 BIOCHEMISTRY
(SPECIAL EXAM)

Marks: 60

Duration: 150 mins.

1) Answer the following in short:

- 1A) Name any two transporters involved in the absorption of glucose and write their role. (2)
- 1B) Define the terms electron transport chain and oxidative phosphorylation. (2)
- 1C) Define phospholipids. Give any two examples for the same. (2)
- 1D) List Four functions of vitamin C. (2)
- 1E) Mention the effects of insulin on glucose metabolism. (2)
- 1F) Write a note on proenzymes. (2)

2) Answer the following in short:

- 2A) Classify enzymes based on reaction specificity giving one example each for each of the classes. (3)
- 2B) Write briefly on the structure of glycogen. (3)
- 2C) Write three reactions catalysed by the key enzymes of gluconeogenesis. (3)
- 2D) Explain FOUR salient features of beta sheets of proteins with diagrammatic representation for its types. (3)
- 2E) Describe briefly two methods of regulation of glycogen synthesis. (3)
- 2F) Explain the reactions of ketogenesis. (3)

3) Answer the following in short:

- 3A) Write the sequence of biochemical events starting from oxidation of LDL to myocardial infarction. (5)
- 3B) Write a note on carnitine shuttle and describe the reactions of beta oxidation of fatty acids. (5)

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