

Abhinav Bindra Sports Medicine and Research Institute BPT 2nd Semester 1st Internal Examination

Date: 10.07.2025

Time: 09 AM-11:30 AM

Subject: Biochemistry

F.M. - 40

A) LONG QUESTIONS - Answer any 2 (2 X 20)

- 1. What is Glycolysis? Describe it with the help of flow chart. How many ATPs are generated in aerobic glycolysis.
- 2. Describe the factors influencing enzyme catalysis.
- 3. Discuss on water and electrolytes balance in human body.

B) SHORT QUESTIONS- Answer any 3 (3 X 5)

- 1. Essential fatty acid
- 2. Metabolic Acidosis
- 3. HMP shunt
- 4. Difference between DNA & RNA
- 5. Ketone bodies

C) OBJECTIVE TYPE QUESTION (1 x 5)

- 1. Which of the following is a waste product of protein metabolism?
 - a) Glucose
 - b) Fatty acids
 - c) Urea
 - d) Amino acids
- 2. Ketogenesis is the process of:
 - (a) Synthesis of glucose from non-carbohydrate precursors
 - (b) Breakdown of fatty acids to produce acetyl-CoA
 - (c) Synthesis of ketone bodies from acetyl-CoA
 - (d) Breakdown of ketone bodies to produce energy
- 3. Which cells of the pancreas produce insulin?
 - (A) Alpha cells
 - (B) Beta cells
 - (C) Delta cells
 - (D) Gamma cells
- 4. Beriberi is caused by the deficiency of:
- (a) Vitamin A
- (b) Vitamin B1 (Thiamine)
- (c) Vitamin C
- (d) Vitamin D
- 5. Identify the purine base of nucleic acids in the following.
 - a) Cytosine
 - b) Thymine
 - c) Uracii
 - d) Adenine