



Paper ID : 253214

Roll No:

BPHARM
(SEM II) THEORY EXAMINATION 2025-26
BIOCHEMISTRY**TIME: 3 HRS****M.MARKS: 75****Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief. 10 x 2 = 20**

a.	Define biomolecules. Give two examples.
b.	What is ATP? Mention one biological role.
c.	Define glycolysis. Where does it occur?
d.	What is gluconeogenesis?
e.	Name any two functions of the citric acid cycle.
f.	What is β -oxidation?
g.	Define ketone bodies.
h.	Define enzyme.
i.	What is jaundice?
j.	Define atherosclerosis.

SECTION B**2. Attempt any two parts of the following: 2 x 10 = 20**

a.	Explain glycolysis with its pathway, energetics and significance.
b.	Describe the Electron Transport Chain (ETC) and explain oxidative phosphorylation.
c.	Explain lipid metabolism with special reference to: a) β -oxidation of fatty acids b) Formation of ketone bodies

SECTION C**3. Attempt any five parts of the following: 7 x 5 = 35**

a.	Describe the HMP shunt pathway and its significance.
b.	Explain glycogen metabolism and glycogen storage diseases.
c.	Describe the urea cycle and mention its disorders.
d.	Explain the structure of DNA and its functions.
e.	Write a note on enzyme inhibition with suitable examples.
f.	Explain cholesterol metabolism and its biological significance.
g.	Explain in detail about the therapeutic and diagnostic application of enzymes and isoenzymes.