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**BPHARM**  
**(SEM II) THEORY EXAMINATION 2021-22**  
**BIOCHEMISTRY**

*Time: 3 Hours**Total 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.	Explain the term Phospholipids with examples.
b.	Define essential and non-essential amino acids.
c.	Discuss the term Transamination giving an example.
d.	Define genetic code with suitable example.
e.	Define Enthalpy and Entropy.
f.	Enlist two diseases associated with glycogen metabolism.
g.	Define ketone bodies and ketoacidosis.
h.	Differentiate between Apoenzyme and Holoenzyme
i.	Define electron transport chain and ATP.
j.	Write down the biological role of Nucleic Acid.

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

a.	Demonstrate the kinetics of enzymes with derivation of Michaelis-Menton Equation.
b.	Explain the salvage pathway of purine and pyrimidine biosynthesis.
c.	What are ketone bodies? Explain the reactions involved in formation of ketone bodies with suitable example.

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

a.	What is oxidative phosphorylation with its mechanism.
b.	Write a note on $\beta$ -oxidation of saturated fatty acid.
c.	What is enzyme? Discuss effect of temperature and pH on properties of enzyme.
d.	Discuss DNA repair mechanism.
e.	Describe urea cycle with the reactions involved.
f.	Illustrate the steps involved in biosynthesis of cholesterol.
g.	Explain the structure of DNA and RNA.