Subject Code: BP203T

PAPER ID-421068

Roll No: | | | | | | | | | | | | | |

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.	Give examples for energy rich compounds.
b.	Define carbohydrates. Classify them with examples.
c.	Outline the term anaplerosis with its significance.
d.	Describe Glycogen storage diseases.
e.	Express about carnitine shuttle system and its importance.
f.	Write about Phenylketonuria and its clinical manifestation.
g.	Explain the features of genetic code.
h.	Discuss the organization of mammalian genome and its size.
i.	What is allosteric enzyme inhibition? Give examples.
j.	Write about coenzymes and their role in biochemical reactions with one example.

SECTION B

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

a.	Incorporate the reactions of pentose phosphate pathway with its significance and deficiency manifestation.
b.	Summarize the protein synthesis in detail. Outline protein synthesis inhibitors.
c.	Explain the β-oxidation pathway of fatty acid with its bioenergetics.

SECTION C

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

a.	Classify Lipids and fatty acids. Portray the nomenclature and biological role of fatty acids
b.	Demonstrate the pathway of glycogenolysis with its significance.
c.	Illustrate oxidative phosphorylation along with its mechanism in ETC.
d.	Explain the urea cycle with its disorders.
e.	Point out the features of transcription with a neat diagram.
f.	Distinguish enzymes and isoenzymes. Outline the classification of enzymes based on IUBMB nomenclature with suitable example.
g.	Describe the Michaelis menten enzyme kinetics. What is competitive enzyme inhibition?