

Programme: BPT  
 Course: Biochemistry  
 Course Code: 23A205  
 Enrolment no. \_\_\_\_\_

 Full Marks: 70  
 Time: 3 Hrs.

Q.No.	Questions	CO	Bloom Taxonomy Category	Marks
<b>Section I</b>				
1	<b>Short Answer type questions.</b>			<b>4 x 5 = 20</b>
a	Explain the function of mitochondria and how it acts as the power house of the cell.	CO1	Understand	
	or			
b	What is the difference between prokaryotic and eukaryotic cells?	CO1	Remember	
	or			
	Explain the functions of amino acids in detail.	CO5	Remember	
c	Explain the formation of Urea cycle.	CO5	Understand	
	or			
	Write about the classification of carbohydrates.	CO2	Remember	
	or			
d	Mention the factors affecting BMR.	CO2	Remember	
	or			
	Mention the causes of fatty liver.	CO2	Remember	
	What is obesity? Write its causes.	CO2	Remember	
<b>Section II</b>				
<b>Long Answer type questions.</b>				
2	What do you mean by Balanced diet? Explain its application in physiotherapy.	CO5	Apply	<b>3 x 10 = 30</b>
	or			
3	Elaborate synthesis and catabolism of purines.	CO5	Remember	
	or			
	Explain the process of translation with a diagram.	CO3	Understand	
4	Explain the structure of DNA with the help of Watson & Crick model. Add a short note on transcription.	CO3	Understand	
	or			
	Analyze the clinical application of enzymes? Mention the enzyme inhibitors.	CO6	Analyze	
	Analyze all the pituitary hormones and explain its mechanism of action.	CO6	Analyze	
<b>Section III</b>				
<b>Application based questions.</b>				
5	Elaborate and explain glycogenolysis. Also explain its application in our body.	CO2	Apply	<b>1 x 20 = 20</b>
	or			
	How is cholesterol synthesized in our body? How does high cholesterol influence fatty liver?	CO2	Apply	

**COURSE OUTCOME**
**At the end of course, candidate will able to**

CO1 To able to describe physiochemical phenomena of Osmosis, Diffusion, Donnan Membrane equilibrium. Describe the physiology of the carbohydrate Digestion in humans.

CO2 Illustrate the metabolism of carbohydrates through various anabolic and catabolic pathways like glycolysis, Kreb's cycle, Glycogen metabolism, glucuronic acid cycle etc.

CO3 Relate the structure of DNA with its function in Replication and gene expression that include both transcription and translation.

CO4 Have a chemistry knowledge of connective tissue, bone and teeth.

CO5 Have knowledge of vitamins, minerals, carbohydrates, protein, fats and balance diet

CO6 Have a knowledge of biochemical like enzymes, endocrinology.