

## M.Sc Semester-2 Examination

407

Pharma Science

Time : 2-30 Hours]

April-2024

[Max. Marks : 70

Q.1A	WRITE TCA CYCLE WITH REGULATION	7
Q.1B	EXPLAIN GLUCONEOGENESIS AND WRITE ITS STEPS	7
	OR	
Q.1A	WRITE ETC AND CALCULATE HOW MANY ATP PRODUCED FROM COMPLETE OXIDATION OF 1 GLUCOSE?	7
Q.1B	WRITE GLYCOL GENOLYSIS	7
Q.2 A	EXPLAIN THE CLASSIFICATION OF LIPIDS AND WRITE DOWN THE BIOLOGICAL ROLE OF LIPIDS.	7
Q.2 B	WRITE A BRIEF NOTE ON UNSATURATED AND SATURATED FATTY ACIDS.	7
	OR	
Q.2 A	LIST OUT DISEASES RELATED TO LIPID METABOLISM AND EXPLAIN ANY 2 IN DETAIL.	7
Q.2 B	WHAT IS THE FATE OF GLYCEROL IN FATTY ACID METABOLISM? GIVE NAMES OF KETONE BODIES AND EXPLAIN THE ROLE OF KETONE BODES.	7
Q.3 A	WHAT IS TRANSAMINATION AND DEAMINATION?	7
Q.3 B	EXPLAIN THE FORMATION OF BILE PIGMENTS.	7
	OR	
Q.3 A	EXPLAIN DE NOVO PYRIMIDINE SYNTHESIS AND ITS REGULATION IN DETAIL.	7
Q.3 B	GIVE AN OVERVIEW OF AMINO ACID BIOSYNTHESIS.	7
Q.4 A	ILLUSTRATE DIAGRAMMATICALLY THE PROTON/ELECTRON FLOW AND EXPLAIN IN DETAIL ELECTRON TRANSPORT CHAIN.	7
Q.4 B	DISCUSS IN DETAIL THE CLASSIFICATION OF THE ENZYMES INVOLVED IN PROCESS OF BIOLOGICAL OXIDATION.	7
	OR	
Q.4 A	EXPLAIN ABOUT BIOLOGICAL SIGNIFICANCE& DEFICIENCIES OF TOCOPHEROLS AND QUINONES ALONG WITH ITS STRUCTURAL DETAILS.	7
Q.4 B	GIVE SOURCES, DAILY REQUIREMENTS, METABOLISM, FUNCTIONS, CLINICAL MANIFESTATION OF PHOSPHORUS, SODIUM AND POTASSIUM.	7
<b>Q.5</b>	<b>ANSWER THE FOLLOWING SHORT QUESTIONS (ANY 7)</b>	<b>14</b>
1	WHICH NEUROTRANSMITTERS ARE SYNTHESISED FROM TYROSINE?	
2	WHAT IS TRANS DEAMINATION?	
3	WHAT IS MACRO CYCLE?	
4	WHICH AMINO ACID IS USED TO SYNTHESIS EAMINOL EVULINATE IN BACTERIA AND PLANTS?	
5	HOW MANY ELECTRONS ARE TRANSPORTED IN COMPLEX 4 OF ETC ACROSS INNER MITOCHONDRIAL MEMBRANE.	

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6	WRITE THE NAME OF INHIBITORS OF COMPLEX 4 IN ETC.	
7	WRITE DOWN THE NAMES OF STEROLS IN PLANTS AND FUNGI.	
8	LIST OUT THE VITAMINS THAT ARE LIPID SOLUBLE.	
9	WHICH HORMONES ENHANCES THE LIPOLYSIS REACTION?	
10	DEFINE CATALYST AND GIVE GRAPHICAL REPRESENTATION OF GIBBS ENERGY CHANGE FOR AN UNCATALYZED AND CATALYZED REACTION.	
11	EXPLAIN REDOX POTENTIAL AND P:O RATIO.	
12	WRITE IN BRIEF REGARDING SIGNIFICANCE OF BIOLOGICAL OXIDATION AND OXIDATIVE PHOSPHORYLATION.	

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