

M.Sc Sem.-2 Examination

P - 410

Pharma. Science

June 2022

Time : 2-00 Hours]

[Max. Marks : 50

Q.1	Answer the Following Questions (Any Six)	42 Marks
1	GIVE INFORMATION ABOUT MICROSCOPE AND TYPES OF MICROSCOPES IN DETAIL.	
2	GIVE TYPE AND INFORMATION ABOUT ELECTRON MICROSCOPE.	
3	GIVE APPLICATION OF IR SPECTROSCOPY IN ANALYSIS.	
4	DEFINE WOODWARD-FIESER RULES AND APPLICATIONS OF UV SPECTROSCOPY.	
5	EXPLAIN BASIC PRINCIPLE OF CHROMATOGRAPHY. DISCUSS IN BRIEF THE CLASSIFICATION OF CHROMATOGRAPHY TECHNIQUE.	
6	EXPLAIN IN DETAIL EFFICIENCY OF SEPARATION IN CHROMATOGRAPHY	
7	WRITE DOWN THE BASIC PRINCIPLE OF ION EXCHANGE CHROMATOGRAPHY (IEC). DISCUSS IN BRIEF WORKING MECHANISM OF IEC	
8	WRITE DOWN THE BASIC PRINCIPLE OF MASS SPECTROMETRY AND DISCUSS ITS INSTRUMENTATION WITH NEAT DIAGRAM.	
9	DISCUSS THE BASIC PRINCIPLE AND WORKING MECHANISM OF HPLC	
10	DISCUSS ANY TWO MASS ANALYZERS IN DETAIL	
Q.2	Answer the Following Short Questions (Any Eight)	8 Marks
1	DEFINE DEAD TIME IN CHROMATOGRAPHY.	
2	DEFINE RESOLUTION AND RETENTION TIME IN CHROMATOGRAPHY?	
3	WRITE DOWN THE APPLICATION OF SILICA GEL G254 STATIONARY PHASE USED IN TLC.	
4	WHICH FACTORS DO AFFECT ION EXCHANGE SEPARATION?	
5	WRITE DOWN RESOLUTION EFFICIENCY OF CAPILLARY COLUMNS IN INCREASING ORDER.	
6	WHAT IS THE EFFECT OF STATIONARY PHASE THICKNESS ON RESOLUTION IN GAS CHROMATOGRAPHY?	
7	GIVE TYPES OF SPECTROSCOPY.	
8	WHICH EMR MAY CAUSE VIBRATIONS IN MOLECULE?	
9	WHO GAVE THE NAME "CELLS" FIRST AFTER OBSERVING THE CORK IN MICROSCOPE?	
10	WHAT IS THE FUNCTION OF DIAPHRAGM IN MICROSCOPE?	

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