

[illegible]

Total No. of Questions : 08

Subject Code : MSPC-103

Date of Examination : 17-01-23

Max. Marks : 80

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries SIXTEEN marks.

1.
 - a) What is solubility product? Discuss the factors affecting the solubility of precipitates.
 - b) Write the calibration of IR and HPLC.
2. Write a note on :
 - a) Common ion effect
 - b) Method of expressing concentration
 - c) Primary and secondary standard
 - d) Standard deviation
 - e) Buffer and Buffer capacity.
3. Give the details of principle, methodology and application of Non aqueous titrations.
4. Give the details of principle, methodology and application of paper chromatography.
5. What are Redox Titrations? Write about various redox indicators. Elaborate on iodometric and iodimetric titrations.
6. Write the principle, instrumentation, and application of Gas chromatography with special reference to detection method. Give examples for derivatization GC method.
7. Give the details of principle, methodology and application of complexometric titrations.
8. What is Chromatography? Give its principle and classification. Write about various theories of chromatographic separations.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.