MPH-101T

M. Pharm. (P'Ceutics)—I Semester (Reg./Ex) Examination, March-2021 Modern Pharmaceutical Analytical Techniques • **Clime: Three Hours*

Maximum Marks:75

Note: Attempt any five questions. (Each question carries equal marks)

- Q.1 Explain the principle, application and instrumentation of double beam UV spectroscopy.
- Describe the principle and any two types of ionization methods of mass spectroscopy.
- Q.3 Classify Ion exchange, Ion exchangers used in Ion exchange chromatography. Enumerate the mechanism and factors affecting Ion exchange process.
- Q.4 Write on principles of separation and detection methods in HPLC.
- Q.5 What is Immunological assays? Write about RIA (Radio immuno assay), ELISA, and Bioluminescence assays?

- Q.6 Write the principle and interferences of Flame Emission spectroscopy.
- Q.7 What is X ray Crystallography? Explain X ray powder technique, Types of crystals and applications of X- ray diffraction?
- Q.8 Write short notes (Any Two)
 - (a) Paper electrophoresis
 - (b) Zone electrophoresis
 - (c) Moving boundary electrophoresis
 - (c) Iso electric focusing
