

Roll No.

Y – 3216
M.Sc. (Fourth Semester)
EXAMINATION, May/June 2021
INDUSTRIAL CHEMISTRY
(Advanced Instrumental Techniques)
Time : Three Hours

Maximum Marks : 85

Minimum Pass Marks : 29

Note : Attempt all questions.

Unit-I

1. Explain instrumentation and applications of DSC. 17

Unit-II

2. Write general techniques and apparatus of potential coulometry. 17

Unit-III

3. Write in detail about neutron diffraction. 17

Unit-IV

4. Write notes on any *two* of the following : 17
- (a) Fluorescence
 - (b) Phosphorescence
 - (c) Polarimetry

Unit-V

5. Write notes on any *two* of the following : 17
- (a) Use of electron microscopy in surface characterization
 - (b) Discuss TLC
 - (c) Fluid extraction