Seat No: _____ Enrollment No:

PARUL UNIVERSITY FACULTY OF PHARMACY

B.Pharm. Winter 2019-20 Examination

Semester: 4 Date: 04/12/2019

Subject Code: 08101252 Time: 02:00pm to 05:00pm

Subject Name: Pharmaceutical Analysis-II Total Marks: 75

Instructions:

- 1. Figures to the right indicate full marks.
- 2. Make suitable assumptions wherever necessary.

Q.1 Essay type Questions. (Any 2 out of 3) (10 marks each)

(20)

- 1. Write a note on Continuous extraction. Explain with suitable example.
- 2. What is TGA? Explain in detail about its working principle, advantage and application.
- 3. Define Electrode. Explain the principle and working of Glass Electrode. Write the advantages and applications of glass electrode.

Q.2 Short Essay type Questions. (Any 7 out of 9) (5 marks each)

(35)

- 1. Write a note on Dropping mercury electrode.
- 2. Explain Kohlrausch's law. Write a note on factors affecting conductance.
- 3. What is Validation? Explain accuracy and precision in detail.
- 4. What are Electroanalytical methods? Classify Electroanalytical methods of analysis.
- 5. Define Conductance. Write a note on types of Conductometric titration with respect to acid and base.
- 6. Write a note on DSC.
- 7. Write short note on Isotopic dilution method.
- 8. Draw a neat and labeled diagram of "Polarimeter". Explain its working principle.
- 9. Differentiate Galvanic cell and Electrolytic cell.

Q.3 Answer in short. (2 marks each)

(20)

- 1. Define: i.) robustness ii) Molar conductance
- 2. What is the use of auxillary electrode in DME?
- 3. Write about Scintillation.
- 4. Give the equation for Ohm's law.
- 5. Differentiate Alpha and Beta particles.
- 6. Enumerate method of detecting end point by potentiometry titration.
- 7. Define: (i) pH (ii) Diffusion current
- 8. Differentiate Indicator electrode and Reference electrode
- 9. Which properties of the material measured by Thermal Analysis?
- 10. Why Nitrogen is used as purging gas in DME?