



International Islamic University Chittagong
Department of Pharmacy

Program: B. Pharm (Hons)

Examination: Final

Session: Autumn-2021

Course Code: Pharm-3609

Course Title: Pharmaceutical Analysis-II

Full Marks: 50

Time: 2 Hours and 30 Minutes

Group A (Marks: 20)

Answer any two questions

1. a) State the Lambert's and Beer's Law. Explain deviation from Lambert-Beer's Law with example 5
b) Explain the effect of temperature on diffusion current. 2
c) Outline the merits and demerits of DME. 4
2. a) How are current and voltage related to each other in polarography? 3
b) Why do maxima appear in polarogram? How can you overcome this problem? 4
c) What is oxygen wave? How can you overcome it? 3
3. a) Briefly state the basic principle of amperometric titration. 3
b) Explain the titration curves of different types of amperometric titration. 4
c) Briefly discuss the applications of amperometry. 3

Group B (Marks: 30)

Answer any three questions

4. a) Define conductance. What are the factors affecting conductance of ions? 3
b) Explain your idea about the instrumentation of conductometric titration. 3
c) Depict the conductometric titration curves of different types of acid-base titrations. 4
5. a) Define following terms: reference electrode, indicator electrode, and junction potential 3
b) Interpret the principle of potentiometric titration. 3
c) Explain the construction of glass indicator electrode used in acid-base potentiometric titration. 4
6. a) What do you know about stationary phase and mobile phase? 3
b) Depict the components of TLC system with appropriate figure. 4
c) Write a short note R_f value. 3
7. a) Describe the construction of HPLC. 3
b) Explain your idea about column technology. 4
c) Describe the analytical applications of HPLC in pharmacy.. 3