



International Islamic University Chittagong

Department of Pharmacy

Program: B. Pharm (Hons)

Examination: Final

Session: Spring-2019

Course Code: Pharm-4801

Course Title: Pharmaceutical Technology-III

Full Marks: 50

Time: 2 Hours and 30 Minutes

Group A (Marks: 20)

Answer any two questions

1. a) Why is aerosol more advantageous over other dosages form? 3
b) Define propellants. Classify propellants with examples of each group. 4
c) What is actuator? Write down the advantages and disadvantages of metered dose inhalers. 3
2. a) Describe the name and functions of additives used in parenteral formulation. 3
b) Classify glass containers used in packaging of parenteral formulation packaging. 2
c) Diagrammatically show the manufacturing process of parenteral dosage form. 3
d) What do you mean by lyophilization? 2
3. a) Name the quality control test of parenteral formulation. 3
b) What do you mean by LAL test? Depicts the mechanism and process of LAL test. 4
c) Classify ophthalmic preparation. Describe the quality control parameter of ophthalmic preparation. 3

Group B (Marks: 30)

Answer any three questions

4. a) What do you understand by pharmaceutical packaging? Write down the criteria for selection of packaging type and packaging materials. 4
b) Write down the differences between strip and blister packaging. 3
c) Describe the drug plastic consideration during selection of plastic as packaging materials. 3
5. a) "Suppositories bypass the first pass metabolism"-is it true or false? Give your justification with example. 3
b) Note down the ideal characteristics of suppository bases. 3
c) Illustrate the advantages and disadvantages of cocoa butter and glycerol-gelatin as suppository base. 4
6. a) Briefly explain the various types of closures. 3
b) Explain the concept of child resistant packaging. 3
c) Enlist the evaluation test for packaging materials. 4
7. a) Classify clean room according to EU pharmaceutical cleanliness grade. 2
b) What are the different types of contaminants in pharmaceutical area? Describe the sources of contamination along with its preventive measures. 3
c) Write down the differences between unidirectional air flow and non-unidirectional air flow. 2
d) What do you mean by HEPA? Note down the characteristics of laminar air flow. 3