

(2 Hours)

[Total Marks: 40]

- N.B: (1) All the questions are **compulsory**.
 (2) **Figures** to the **right** indicate full marks.
 (3) Draw neat labelled sketches wherever necessary

- Q1. a. State properties of an ideal package. 1M
 b. State any two Q.C. tests for glass containers. 1M
 c. Describe any two plastic disposable devices used in pharmacy practice. 2M
 d. State the components of a typical aerosol valve 1M
 e. State any two advantages of Blister Packs. 1M
 f. Enlist any two defects in printing of labels 1M
 g. State classification of elastomers. 1M
 h. State any two defects seen in paper and paper board. 2M
- Q2. a. Discuss the different performance tests for glass containers. 3M
 b. Discuss a method suitable for sterilization of plastic containers. 3M
- OR**
- b. Elaborate on sterilization of glass ampoules. 3M
- Q3. a. Discuss plastic containers for ophthalmic preparations 3M
 b. Write on adhesives and printing inks for labelling. 3M
- Q4. a. Elaborate on aluminium as a packaging material for pharmaceuticals. 3M
 b. Write a note on Packaging and the ICH guidelines 3M
- OR**
- b) Elaborate on Climatic chambers for stability testing of packages. 3M
- Q5. a. Elaborate on flexible packaging materials for pharmaceuticals. 3M
 b. Describe blister packaging process w.r.t. materials used and machinery. 3M
- OR**
- b) Elaborate on sachets for packaging of pharmaceuticals. 3M
- Q6. a. Write on primary and secondary packaging materials with examples. 2M
 b. Elaborate on cushioning materials in packaging. 2M
 c. Write on liners and child resistant caps. 2M