

- 1.(a) Explain the properties and selection of various adjuvants used in the formulation of tablets and semisolids. (8)
- (b) Explain with examples organoleptic agents. (6)

OR

- (c) Mention various filling methods of hard gelatin capsules and explain any two methods? (9)
- (d) Briefly explain evaluation of hard gelatin capsules. (5)

- 2.(a) Explain the difference between flocculated and deflocculated suspensions. (6)
- (b) Explain the identification of various types of emulsions. (8)

OR

- (c) Define emulsion. What are multiple emulsion? Write in detail about stability of emulsion. (14)

- 3.(a) Mention various advantages and disadvantages of tablets formulation. Explain various processing problems during compression. (14)

OR

- (b) Mention various types of coating processes. What do you mean by enteric coating? Detail about defects of coating. (14)

- 4.(a) Mention various types of parenteral preparations. Explain the formulation of parenterals. (10)
- (b) Write a note on pyrogen testing. (4)

OR

- (c) What are the general requirements for the preparation of ophthalmic preparations? Explain the method of preparation of eye ointments. (8)
- (d) Write a note on QC of ophthalmic preparations. (6)

- 5.(a) What are aerosols? Mention the advantages and disadvantages. Explain various types of propellants used in the preparation of aerosols. (7)
- (b) Explain with a neat sketch the parts of aerosol container and materials used in the construction. (7)

OR

- (c) What are the ideal properties of good pharmaceutical packaging? Explain glass as a packaging system. (8)
- (d) Write a note on packaging of semisolids. (6)
