

Time : 3 Hours

Marks : 70

- NB: 1. All questions are compulsory
2. Figures to the right indicate full marks

- Q 1 a Comment on the kinetic stability of dispersed systems. 3
b Enlist the different factors affecting skin penetration. 2
c Define suppositories. Give the advantages of suppositories. 3
d State the problems associated with blood products. 2
e Explain how sterility of ligature is evaluated. 3
f State the applications of emulsions. 2
- 2 a Enlist the quality control tests for suspensions. Explain any two quality control tests in detail. 4
- OR**
- Discuss the various equipment used in formulation of emulsions. 4
- b Classify suppository bases. Explain the desirable properties of suppository bases. 4
c Explain Non-absorbable sutures of animal origin. 3
- 3 a Explain the following: i) Wetting ii) Electrical double layer 4
b Elaborate on Albumin preparations or Red Cell Concentrate. 4
c Outline the liquefaction test for suppositories. 3
- 4 a Explain raw materials used in Semisolid preparations. 4
b Enlist various methods of selection of emulsifiers and explain any one in detail. 4
c Elaborate on Dextran as plasma substitute. 3
- OR**
- c Write a note on Molecular weight requirements for dextran and labelling criteria for dextran. 3
- 5 a Discuss any one method of suspension preparation. 4
b Elaborate on large scale manufacturing of ointments. 3
c Discuss large scale manufacturing of suppositories. 4
- OR**
- Outline the problems encountered during formulation of suppositories. 4
- 6 a Elaborate on the process of sterilization of catgut. 3
b Elaborate on Preservation of emulsions. 4
- OR**
- Explain the following, Creaming, Flocculation and Coalescence. 4
c Elaborate on Penetration enhancers and mechanism of penetration enhancement. 4
