

20-12-15

Sem - IV (CBSSGS) = Pharmaceutics - II

QP Code : 21734

(3 Hours)

[Total Marks : 70]

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

1. (a) Explain the concept of surface free energy in disperse systems. 3
(b) With neat-labeled sketch, show various pathways for drug entry in skin. 2
(c) What are the ideal attributes of suppositories as a dosage form? 3
(d) Mention the hazards encountered during the use of blood products. 2
(e) Describe the test for tensile strength of sutures. 3
(f) State various advantages and disadvantages of emulsions. 2
2. (a) Give an account of stress testing of emulsions. 4
OR
(a) With the help of layout explain the steps involved in large scale manufacturing of suspensions.
(b) Explain in detail various specifications for suppositories bases. 4
(c) Write a note on polymeric sutures. 3
3. (a) What are the causes of crystal growth in suspension? How will you overcome the problem of crystal growth in suspensions? 4
(b) Write a note on: Clotting factor OR Principle of plasma fractionation by solvent precipitation 4
(c) Outline the disintegration test of suppositories. 3
4. (a) Enlist various ointment bases. Describe one in detail. 4
(b) Explain the emulsifier selection by PIT method. 4
(c) What are the advantages of dextran as plasma volume expander? 3
OR
(c) Discuss hydrolyzed gelatin based products.
5. (a) Outline the method for preparation of suspensions by organic solvent precipitation. 4
(b) Elaborate on large-scale manufacturing of creams. 3
(c) Discuss the problem of volume contraction in suppository manufacture. 4
OR
(c) Write a note on packaging of suppositories.
6. (a) What is hardening of sutures? Elaborate on hardening process. 3
(b) Explain the rheological aspects of emulsions. 4
OR
(b) Use of mixed emulsifiers confers the greater stability in emulsion. Comment
(c) Elaborate on various physiological factors affecting skin penetration. 4