

0805

21819

3 Hours / 80 Marks

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.
(2) Illustrate your answers with neat sketches wherever necessary.
(3) Figures to the right indicate full marks.
(4) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. **Attempt any EIGHT of the following:** **16**
- Give any four reasons for film coating.
 - Explain any four factors affecting size reduction.
 - Define drug and dosage forms.
 - Give the significance of drying.
 - Write the difference between hard and soft gelatin capsule.
 - Find out the proportion of procaine HCL which will yield solution iso-osmotic with blood plasma.
Given: F.P of 1% procaine HCL = -0.122°C .
 - Explain tyndallisation process.
 - List the steps involved in slugging method.
 - Write the advantages of water as solvent for extraction.
 - Write the precautions to be taken while placing the material in hot air oven.

P.T.O.

- 2. Attempt any FOUR of the following:** **12**
- a) Define emulsion and list the different emulsifying agents.
 - b) Write the salient features of fourth edition of I.P.
 - c) Write any three ideal qualities of packing material and any three disadvantages of glass as a material for packing.
 - d) Explain the following evaluation test for tablets. (any one)
 - (i) Friability
 - (ii) Disintegration
 - e) Describe aerosol container with labeled diagram.
 - f) Explain construction and working of Cutter Mill or Hammer Mill.
- 3. Attempt any FOUR of the following:** **12**
- a) Explain the working of ball mill with a well labeled diagram and give any two advantages.
 - b) Explain construction and working of cyclone separator with a well labeled diagram.
 - c) Describe the stages of percolation.
 - d) Explain various grades of powders.
 - e) Write the applications of simple distillation in pharmacy.
 - f) State the following:
 - (i) Arista
 - (ii) Churna
 - (iii) Taila.

- 4. Attempt any FOUR of the following: 12**
- a) Describe the factors which affect rate of the evaporation of liquid.
 - b) Describe construction of autoclave with diagram.
 - c) Explain working, construction of fitter leaf with neat diagram.
 - d) Describe working of FBD with well labeled diagram.
 - e) Explain the types of immunity.
 - f) Describe the process of manufacturing of hard gelatin capsules.
- 5. Attempt any FOUR of the following: 12**
- a) Describe the method of preparation of BCG vaccine with dose, storage and uses.
 - b) Give the significance of sterilization using bactericidal solution, explain the method and name the bactericidal agents.
 - c) Describe the method of distillation for immiscible solutions.
 - d) Explain the construction and working of triple roller mill.
 - e) Write the stages involved in sterilization of surgical dressings.
 - f) How will you prepare 5 fl. Oz solutions and using that prepare a 5 litre 1 in 2000 solution?
- 6. Attempt any FOUR of the following: 16**
- a) Explain any four manufacturing defects in tablet manufacturing.
 - b) What is aseptic technique? List the various sources of contamination and explain the sterility test.
 - c) Find the volume of 20%, 15%, 10% and 8% alcohol should be mixed to get 12% alcohol 300 ml.
 - d) Define mixing, explain the types and mechanism of mixing.
 - e) Discuss novel drug delivery systems.
 - f) Explain the method of hot percolation process with well labeled diagram and write its limitations.
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