

0805

11819

3 Hours / 80 Marks

Seat No.

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

Marks

1. Answer any TEN of the following: 20
- Define following terms:
 - Syrup
 - Cream
 - Enlist the ideal qualities of container.
 - Explain any four factors affecting size reduction.
 - Describe simple maceration process.
 - List the precautions to be taken while using hot air oven.
 - Explain friability test for evaluation of tablets.
 - Differentiate between Endotoxin and Exotoxins.
 - Name various Novel Drug Delivery systems.
 - Enlist the ideal qualities of filter aid.
 - Write the disadvantages of formaldehyde gas when used for sterilization.

P.T.O.

- k) Differentiate between hard and soft gelatin capsules.
- l) Describe the types of mixing.

2. Answer any FOUR of the following: 12

- a) Define and classify dosage forms.
- b) Explain the construction and working of ball mill.
- c) Define extraction and explain reverse percolation process.
- d) Give any two applications of simple distillation. Describe method of separation for two immiscible liquids.
- e) Explain construction and applications of tray dryer.
- f) In what volume 30%, 25%, 18% alcohol should be mixed to get 500 ml 20% alcohol?

3. Answer any FOUR of the following: 12

- a) Define and classify immunity.
- b) Define container and closure. Draw a well labelled diagram of Aerosol container.
- c) Write construction and disadvantages of short tube evaporator.
- d) Explain any four factors affecting filtration. Draw well labelled diagram of leaf filter.
- e) Define the official grades of powders according to I.P.
- f) Define Menstrum, and Mark. Write the advantages of Alcohol as Menstrum.

4. Answer any FOUR of the following: 12

- a) With a well labelled diagram explain the construction of Autoclave.
- b) Give any three importance of dosage forms. Differentiate between mouthwash and gargle.
- c) Write any six salient features of IVth edition of I.P.

- d) Find the amount of sodium chloride required to make 0.5% Ephedrine HCL isotonic with blood plasma. (Given F.P. 1 %, w/v solution of ephedrine HCL = -0.165°C)
- e) Write the advantages of micro encapsulation and list different methods of micro encapsulation.
- f) Explain theory and construction of FBD.

5. Answer any FOUR of the following: 12

- a) Explain any one method for preparation of small pox vaccine.
- b) Describe method for preparation of soft gelatin capsule using rotary machine.
- c) Draw a labelled diagram of apparatus used for continuous hot extraction process. Mention limitations of the process.
- d) Explain the construction and working of filter press.
- e) Explain the construction and working of Silverson mixer homogenizer.
- f) Explain the following manufacturing defects of tablets :
 - (i) Capping and lamination
 - (ii) Picking and sticking

6. Answer any FOUR of the following: 12

- a) Write construction and working of cyclone separation.
 - b) Give principle, method and applications of sterilization using UV radiation.
 - c) Define evaporation and explain any four factors affecting evaporation.
 - d) List the various equipment used for liquid mixing and explain how Vortex Formation can be avoided in liquid mixing.
 - e) Define tablet. Enlist various excipients used in tablet manufacturing with one example each.
 - f) Give advantages and disadvantages of glass as a material used for pharmaceutical containers and state its types.
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