

0805

15116

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. Attempt any EIGHT of the following : 16
- Enlist four methods for size reduction.
 - Define 'drug' and 'dosage form'.
 - Write the main objectives of mixing.
 - Name any four materials used for packaging.
 - Define 'slurry' and 'filter cake'.
 - Why are tablets coated ?
 - Differentiate between active and passive immunity.
 - Define 'menstruum' and state three ideal qualities of a menstruum.
 - Why injectables should not be stored in soda lime glass containers ?
 - List any four equipments used in drying.
 - Give steps involved in moist granulation.
 - Define Pharmacopoeia. List official books used in India.

P.T.O.

- 2. Attempt any FOUR of the following :** **12**
- a) Define sterilisation and classify methods of sterilisation.
 - b) Describe construction and working of a cyclone separator with a neat diagram.
 - c) How many parts of 60%, 45% and 75% alcohol should be mixed to get 50% alcohol ?
 - d) Explain the factors which affect size reduction of drugs.
 - e) Differentiate between hard gelatin and soft gelatin capsules.
 - f) Describe in brief the procedure for preparation of B.C.G. vaccine along with its dose, storage and uses.
- 3. Attempt any FOUR of the following :** **12**
- a) Draw a well-labelled diagram of soxhlet apparatus. What are the limitations of soxhletion method ?
 - b) Enlist different manufacturing defects that may appear in tablets. Explain in brief any two defects.
 - c) Give the importance of dosage forms.
 - d) Explain in detail evaporating still with its advantages and disadvantages.
 - e) Differentiate between Purified Water and Water for Injection.
 - f) Write the working of filter press with a neat labelled diagram.
- 4. Attempt any FOUR of the following :** **12**
- a) Explain the factors affecting evaporation of a liquid.
 - b) Draw a well-labelled diagram of filter candle. Give its working and disadvantages.
 - c) Write advantages and disadvantages of glass as a material for packaging.
 - d) Define drying. Give applications of drying in pharmacy.
 - e) Describe in brief history of Indian Pharmacopoeia.
 - f) Give principle and working of Silverson homogeniser with a neat labelled diagram.

5. Attempt any FOUR of the following : 12

- a) Define 'aseptic technique'. What are the various sources of contamination ?
- b) Give the principle and working of fluidised bed dryer.
- c) Write the special applications of capsules.
- d) State various grades of powder official in I.P.
- e) Define pharmaceutical container. Give qualities of an ideal container.
- f) Discuss working of ball mill with a neat diagram.

6. Attempt any FOUR of the following : 16

- a) Draw a well-labelled diagram of aerosol container and give its advantages and disadvantages.
- b) Mention official and non-official evaluation tests for tablets. Describe weight variation test for tablets.
- c) Give applications of simple distillation. What is the principle of fractional distillation ?
- d) Explain principle and working of fluid energy mill with a diagram.
- e) Describe with diagram working of autoclave.
- f) 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
