

12425

03 Hours / 80 Marks



0805

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**

**20**

**1. Attempt any TEN of the following :**

- a) Differentiate between Syrups and Elixirs.
- b) As per apothecaries' system, solve following
  - i) 1 scruple = \_\_\_\_\_ gr
  - ii) 1 ounce = \_\_\_\_\_ drachm
  - iii) 1 gallon = \_\_\_\_\_ fl. Ounce
  - iv) 1 quart = \_\_\_\_\_ fl. ounce
- c) Enlist four advantages of glass as a packaging material.
- d) Define moderately coarse powder and sieve number.
- e) Explain positive mixtures and negative mixtures with example.
- f) Define filtration and clarification.
- g) Define menstruum and marc.
- h) Define sublimation and evaporation.
- i) Enlist various types of distillation processes.
- j) Enlist any two advantages of Fluidized bed dryer.
- k) Differentiate between sterilization and disinfection.
- l) Name four material used to make containers.
- m) Name any four novel Drug Delivery systems.
- n) Give two advantages of water as menstruum.
- o) Enlist any two advantages of Spray Dryer.

**2. Attempt any FOUR of the following :**

**12**

- a) Define and classify dosage forms in detail.
- b) Enlist six salient features of fourth edition of Indian Pharmacopoeia.
- c) Define Isotonic solution. What happens if RBCs are placed in paratonic solutions?
- d) Define containers. Enlist different types of containers.
- e) Enlist factors affecting size reduction. Explain any four factors.
- f) Describe construction and working of cyclone separator with help of neat labelled diagram.

**3. Attempt any FOUR of the following :**

**12**

- a) Enlist the tests detections of type of emulsion. Explain conductivity test in detail.
- b) Prepare 8 oz of a solution so that two teaspoonfuls diluted to a quart, will make 1 in 5000 solution.
- c) Enlist and describe different parts of an Aerosol container.

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- d) Describe a mill which works on the principle of impact and attrition in respect to–
  - i) Construction
  - ii) Working
  - iii) Diagram
- e) Describe construction and working of Double cone blender with the help of neat labelled diagram.
- f) Enlist factors affecting rate of filtration. Describe any two factors in detail.

**4. Attempt any FOUR of the following :**

12

- a) Define homogenization. Explain construction and working of Silverson Mixer Homogenizer.
- b) Differentiate between maceration of organized crude drugs and maceration of unorganized crude drugs.
- c) Enlist at least three advantages and three disadvantages of Evaporating still.
- d) Describe Distillation under reduced pressure in respect to following:
  - i) Theory
  - ii) Apparatus used
- e) Explain the working of Freeze Dryer in detail.
- f) Define sterilization. Classify different methods of sterilization in detail.

**5. Attempt any FOUR of the following :**

12

- a) Draw and label parts of Soxhlet Apparatus. Enlist use of each part of the Soxhlet apparatus. (Any 3 parts)
- b) Describe advantages and disadvantages of autoclaving.
- c) Define tablets. Enlists various types of tablets.
- d) Enlist various excipients used in formulation of tablets. Describe granulating agents and disintegrating agents.
- e) Differentiate between Hard Gelatin Capsules and Soft Gelatin Capsules. (any 6 points)
- f) Define and classify immunity. Explain the types with examples.

**6. Attempt any FOUR of the following :**

12

- a) Define pharmacopoeia. Enlist various editions of Indian Pharmacopoeia with their year of publication.
  - b) Explain the term “Aseptic Technique”. What are the various points to be considered while designing an Aseptic Room.
  - c) Enlist the parts of a Single Punch Tablet machine with use of each part.
  - d) What is enteric coating of tablet? In which conditions enteric coating is needed?
  - e) Explain Uniformity of Weight test for capsules.
  - f) Explain the preparation, storage, uses and dose of BCG vaccine.
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