

0805

16172

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 SIX of the following: 12
- Define Pharmacopoeia. Give example.
 - Define container and closure.
 - What are qualities of good container.
 - What is difference between filtration and clarification?
 - Give application of Freeze drying.
 - What are advantages of water as menstrum for extraction?
 - What are advantages of evaporating still?
 - Calculate the quantity of dextrose required to prepare one quart of 5% solution.
 - Draw a labelled diagram of double cone blender.

P.T.O.

2. Attempt any FOUR of the following:**12**

- a) Define the following terms:
 - (i) Drug
 - (ii) Dosage Form
 - (iii) Excipients
- b) Define Aerosols. What are the advantages and disadvantages of Aerosols?
- c) Explain the working, advantages and disadvantages of any one mill based on the principle of combined impact and attrition.
- d) Define size reduction. What are the different factors affecting to the rate of size reduction?
- e) How many tablets, each containing 8.75 grains of mercuric chloride will be required to make one pint of 0.2% solution?
- f) Write short note on (any one):
 - (i) Classification of liquid dosage forms
 - (ii) Materials used in plecutical closures

3. Attempt any FOUR of the following:**14**

- a) Differentiate between simple and modified maceration with example.
- b) Define capsule as a dosage form along with it's advantages and disadvantages.
- c) What do you mean by Enteric coated tablets? Give reasons for enteric coating.
- d) Differentiate between filtration and classification. Enlist the different factors affecting the rate of filtration.
- e) How will you prepare 330 g of dilute Acetic acid from Acetic acid IP.
Given:
 - (i) Acetic acid IP = 33% wtr of Acetic acid.
 - (ii) Dilute Acetic acid = 6% wtr of Acetic acid.

- f) Write short notes on (any one):
- (i) Metafilter
 - (ii) Additives in Tablet Formulation

4. Attempt any FOUR of the following: 14

- a) Differentiate between hard and soft gelatin capsules with example.
- b) Define Tablet as a dosage form along with advantages and disadvantages.
- c) What do you mean by reserved percolation? Enlist the different steps involved in it.
- d) Explain different steps involved in sugar coating of tablet.
- e) How will you prepare 180 g of Cmebona powder containing 6% alkaloid from the three lots of powder containing 10%, 8% and 3% alkaloids.
- f) Write short note on (any one):
 - (i) Filter aids
 - (ii) Ayurvedic dosage forms

5. Attempt any FOUR of the following: 14

- a) Differentiate between Active and Passive immunity along with examples.
- b) Define microencapsulation. What are its advantages and different techniques involved in it?
- c) Define drying. What are the different factors affecting to the rate of drying?
- d) Differentiate between evaporation and distillation. Explain the working and applications of simple distillation in pharmacy.

- e) Find the concentration of sodium chloride required to make 1% w/v solution of cocaine HCl iso-osmotic with blood plasma.

Given:

- (i) F.P. of 1% w/v Cocaine HCl = -0.09°C
(ii) F.P. of 1% w/v Sodium Chloride = -0.576°C

- f) Write short note on (any one):

- (i) BCG vaccine
(ii) Silverson-Mixer homogenizer

6. Attempt any FOUR of the following:

14

- a) Differentiate between Sterilization and Disinfection. Enlist the different methods of sterilization with examples.
b) Define immunity. What are the different types of immunity?
c) Define size separation. How will you grade the powders according to IP 1985?
d) Explain the objectives of mixing. Explain the different types of mixtures along with examples.
e) Find the concentration of sodium chloride required to produce a solution iso-osmotic with blood plasma.

Given: Molecular weight of sodium chloride = 58.5 and it dissociate into 2 ions.

- f) Write short note on (any one):

- (i) Cyclone Separator
(ii) Fluidized Bed Dryer
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