

(3 Hours)

Marks : 70

Please check whether you have got the right question paper.

N.B: 1. All questions are **compulsory**.2. **Figures** to the **right** indicate **full marks**3. **Draw neat labelled diagrams wherever necessary.**

Q.1 a. Define and classify dosage forms. 2

b. Define- metabolism and elimination. 2

c. If 0.050 gm of a drug is used in preparation of 125 tablets, how many micrograms are represented by each tablet? 1

d. Define term- Fluidity. 1

e. What are elixirs? Discuss method for preparation of elixirs.

OR

What are components of a Syrup? Outline procedure for syrup preparation with aid of heat. 4

f. Write a note on dusting powder. 2

g. Elaborate on types of complexes. 2

h. Explain drug related factors influencing dissolution process. 1

Q.2 a. Discuss in brief topical route of administration. 3

b. Compare allopathic and ayurvedic systems of medicine. 2

c. Discuss any one solubilization technique used in preparation of monophasic liquid dosage forms. 2

d. What are the requirements of closures? Elaborate on types of closures used in pharmaceutical packaging. 3

e. List different methods used for analysis of complexes. 1

Q.3 a. Give role of Good Manufacturing Practices in pharma industry. 2

b. Give an account of Newtonian fluid systems. 2

c. Explain liquid mixing by Propellers. 2

d. Give applications of Micromeritics. Discuss any one method of particle size determination. 4

e. State Fick's first law of diffusion. 1

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- Q.4 a. Define any three - Paste, Enema, Tablets, Liniments, **3**
- b. Calculate quantities required to prepare 250 ml solution containing. **2**
- Neomycin sulfate.....0.1%w/v
- PMN.....0.002% w/v
- c. Jusify- Sweeteners play important role in enhancing palatability of products. **2**
- d. Explain any one principle of size separation. **2**
- e. State and explain Hixon Crowell law. **2**
- Q.5 a. Elaborate on development of pharmacy profession in India. **2**
- b. Discuss principle of viscosity measurement using Ostwald's viscometer **OR** Cup and bob viscometer. **2**
- c. Distinguish between Clarification and Filtration. Discuss filtration by Leaf filter. **3**
- d. Describe construction and working of a mill based on principle of impact. **4**
- Q.6 a. Explain in brief about development of Indian Pharmacopoeia. **3**
- b. Enlist factors affecting bioavailability. **2**
- c. Outline large scale manufacturing of monophasic liquid dosage forms. **4**
- d. What are Quality control parameters of powders? **2**
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