

(e) Write the basic functions of Indian Pharmacopoeial Commission (IPC).

(f) Outline the reasons for publications of International Pharmacopoeia.

(g) Mention the year of latest edition of Indian Pharmacopoeia. The dissolution test has been introduced in _____ edition of Indian Pharmacopoeia.

(h) The words inscription and signature in prescription signify for _____ and _____.

(i) What is the dose for an 8 months old infant if the average adult dose of a drug is 250 mg ?

(j) How much of 5% will be required to prepare 600ml of 1 in 800 solution ?

2. Answer any *four* of the following : $3 \times 4 = 12$

(a) Write the objectives of publishing USP. What is Merck Index ?

(b) Enlist the factors which influence the dose of a drug in eliciting desired pharmacological response.

- (c) Match the taste with the following flavours :
- | | |
|----------------|--------------------------|
| (i) Sweet | (i) Grape, lemon |
| (ii) Bitter | (ii) Fruity, Vanilla |
| (iii) Metallic | (iii) Chocolate, cherry. |
- (d) Find out the amount of 70%, 60%, 40% and 30% alcohol to be mixed to prepare 50% alcohol.
- (e) Calculate the real strength of 30° O.P. and 40° U.P.

3. Answer any *five* of the following : $5 \times 4 = 20$

- (a) How maceration process differs from digestion process ? Give two examples of infusions.
- (b) Write in brief the salient features of 2007 fifth edition of Indian pharmacopoeia.
- (c) Name two coloring agents, flavouring agents and sweetening agents each.
- (d) Find the concentration of sodium chloride required to make 1.0% solution of boric acid iso-osmotic with blood plasma. (F.P of 1%

w/v solution of boric acid is - 0.288 ; F.P. of 1% w/v solution of NaCl is - 0.576).

(e) Translate the following abbreviations to Latin and English :

(i) p.c.

(ii) s.o.s.

(iii) h.s.

(iv) q.i.d.

(f) What is Eutexia formation ? How will you dispense powders containing eutectic substances ?

4. Answer any *four* of the following : $4 \times 5 = 20$

(a) What is ANDA ? Elaborate the steps for evolution of new drug development.

(b) Differentiate between :

(i) Reserve percolation and modified percolation.

(ii) Infusion and decoction.

(c) Write a note on scope of pharmacy education in India.

(d) What is displacement value ? Write its importance in preparation of suppositories.

(e) Write the special labelling instructions for dispensing following dosage forms :

- (i) Dusting powders
- (ii) Liniments
- (iii) Aerosol inhalation
- (iv) Gargles
- (v) Enemas.

5. Answer any *three* of the following : $3 \times 10 = 30$

(a) Write a note on history of development of Indian Pharmacopoeia. Write the uses of British Pharmacopoeia and Martindale Extra Pharmacopoeia. $6+4=10$

(b) (i) Explain the chemical incompatibilities which occur due to evolution of Carbon-di-oxide and suggest appropriate corrective measures.

(ii) What are the possible sources of errors appeared in prescriptions ? $7+3=10$

(c) (i) What is the relationship between taste and flavour ? Discuss different types of flavours which are used in pharmacy.

(ii) Why pharmaceutical preparations are colored ? Write the qualities of an ideal colouring agent. $6+4=10$

(d) How will you classify different types of dosage forms ? What are the formulation ingredients of following dosage forms ?

$2.5+7.5=10$

- (i) Elixirs
- (ii) Linctuses
- (iii) Emulsions
- (iv) Suspensions
- (v) Lotions.