

Max time: 3 hrs

Max marks: 70

N. B.: (1) All questions are compulsory.

(2) Figures to the right indicate full marks.

- Q.1.a. Convert the following: (2)
- 5 pound = \_\_\_\_\_ mg
  - 10 grains = \_\_\_\_\_ mg
  - 9 litres = \_\_\_\_\_ pints
  - 200 minims = \_\_\_\_\_ ml
- Q.1.b. Explain in brief good pharmaceutical practices in compounding and dispensing (2)
- Q.1.c. Calculate the dose of Drug X for a 5 years old. The adult dose of the same drug is 750 mg (1)
- Q.1.d. Write a brief note on collodions (2)
- Q.1.e. Discuss in brief about suspensions containing volatile oils (2)
- Q.1.f. Enlist the instabilities in emulsion and explain any one (2)
- Q.1.g. Enlist the ingredients used in compounding of Kaolin Poultice BPC stating the role of each ingredient. (2)
- Q.1.h. Write in brief about capsules (2)
- Q.2.a. How would you prepare 300 g of 10% w/w calamine ointment from ointments containing 5%, 15% and 25% w/w calamine (3)
- Q.2.b. Enlist the various types of ointment bases. Write a note on any ONE type of base (4)
- Q.2.c. Comment on the following prescription (4)
- Rx  
Alprazolam 1 mg  
Send 10 powder packet. Each packet weight 120mg  
Label one to be taken every night
- OR**
- Classify powders. Explain the compounding and dispensing of tablet triturates.
- Q.3.a. Enlist the advantages of solution as a dosage form. Comment on the following prescription (4)
- Rx  
100 ml of zinc chloride and zinc sulphate mouthwash BPC  
Zinc chloride                    1% w/v  
Zinc sulphate                    2% w/v  
Label: To be diluted with 20 times its volume of warm water before use
- OR**
- Give an account of solutions instilled into body cavities
- Q.3.b. Classify creams. Write a note on dilution of creams (3)
- Q.3.c. Summarize the compounding and dispensing of pills (4)
- Q.4.a. Write a detailed note on types of prescription (4)
- Q.4.b. Enlist the properties of a good suspension. Write a note on thickening agents used in the compounding of suspension. (4)
- OR**
- Write a note on compounding and dispensing of suspensions containing indiffusible solids
- Q.4.c. Explain the various methods used for compounding of liquid emulsions. (3)

- Q.5.a. Find the amount of NaCl to be included in 100 ml of a 0.3% w/v solution of zinc sulphate so that, on dilution with an equal quantity of water, it will be iso-osmotic with tissue fluids. (3)  
Given:  
Freezing point of 1% w/v solution of zinc sulphate is  $-0.076^{\circ}\text{C}$   
Freezing point of 1% w/v solution of sodium chloride is  $-0.576^{\circ}\text{C}$
- Q.5.b. Give a detailed account of disadvantages of cocoa butter as a suppository base (4)  
OR  
Discuss polyethylene glycol as suppository base
- Q.5.c. Explain chemical incompatibility with one suitable example (4)
- Q.6.a. Give the labelling instructions for any 2 of the following dosage forms: (2)  
1) Ear drops  
2) Liniments  
3) Mouthwashes
- Q.6.b. Give the English translation of the following Latin terms or abbreviations: (2)  
1) Guttae  
2) Si opus sit  
3) Lente  
4) b.i.d.
- Q.6.c. Write in brief about stock solutions (3)
- Q.6.d. In what proportions would you mix Tween 80 (HLB 15) and Span 80 (HLB 4.5) to obtain 50 g of an emulgent having a HLB of 10 (2)
- Q.6.e. Enlist steps involved in compounding of suppository by moulding method and explain lubrication step (2)