

Session III

CBSGS

Pharmaceutics - I

March 2015

QP Code : 15930

(3 Hours)

[ Total Marks : 70

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

1. (a) What is the scope of Pharmaceutics in Pharmacy? 2  
(b) Define 'Distribution'. Enlist factors affecting distribution. 2  
(c) Calculate the quantities required to prepare 750 grams of ointment containing. 1  
    Zinc oxide      0.2% w/w  
    Calamine        0.1% w/w  
(d) Draw a plot of shear rate versus shear stress for Dilatant fluid. 1  
(e) What are elixirs? Discuss in brief the method of preparation of elixir. 4  
(f) Write in brief about dusting powders. 2  
(g) What are organic molecular complexes? Enlist the types of organic molecular complexes. 2  
(h) Enlist the factors affecting dissolution. 1
2. (a) Compare and contrast oral and rectal route of drug administration. 3  
(b) Write a note on alternate system of medicine with reference to Ayurveda. 2  
(c) Explain the importance of evaluating polymorphism during preformulation study of monophasic liquid dosage form. 2  
(d) Describe the closure liners used in packaging. 3  
(e) Enlist the methods of analysis of complexes. 1
3. (a) Explain GMP with respect to personnel. 2  
(b) Differentiate between Newtonian & Non-Newtonian systems. 2  
(c) Explain in brief about impellers used in liquid mixing. 2  
(d) Explain the significance of particle size determination in Pharmaceutical formulation and explain the sedimentation method of particle size determination. 4  
(e) Explain steady state diffusion. 1

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4. (a) Define any **three**: 3  
(i) Poultice (ii) Suspension (iii) Pastilles (iv) Lozenge.  
(b) A 20 ml of 5% w/v dextrose solution is diluted 5 times. Find out % w/v of dextrose in the diluted solution? 2  
(c) Discuss the stabilizers used in liquid preparations. 2  
(d) Enlist all methods of size separation and explain cyclone separator. 2  
(e) State and explain the Hixson-Crowell law. 2
5. (a) Give an overview of the status of Pharmaceutical industry in India. 2  
(b) Explain the principle and working of Ostwald viscometer. 2  
(c) Write in brief about the filter press. 3  
(d) Explain the principle and working of ball mill. 4
- OR**
- (d) Explain in brief the principle and working of fluid energy mill. 4
6. (a) What is Pharmacopoeia? Write in brief about the development of I.P. 2  
(b) Explain the term "relative bioavailability". 2  
(c) Write in brief about large scale manufacturing of monophasic liquid dosage form. 4
- OR**
- (c) Explain the quality control tests for liquid dosage forms. 4  
(d) Write in brief about quality control powder dosage form. 3
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