

B PHARMACY FIRST YEAR SECOND SEMESTER EXAMINATION 2019

SUBJECT: PHARMACEUTICS II

Time 3 hours

Full marks: 100

Answer at least TWO questions from each group

Group A

1. Define emulsion as a dosage form. How will you prepare emulsion by wet gum method? Why is gum acacia prepared freshly? What should be size range of the dispersed globules in a stable emulsion? Describe the role of emulgent in an emulsion. Classify emulgents with proper examples. To prevent cream formation, why do not we use glycerin/ syrup over CMC/HPMC?

$$2+4+2+1+2+5+2+2 = 20$$

2. (a) Describe the various methods identification of emulsion types. What are the causes of cracking of an emulsion?

(b) Write short notes on: Plastibase, Lanolin, Water soluble bases

$$6+4+4+3+3 = 20$$

3. Define ointments. How are they different from pastes and creams? Classify ointment bases with examples in each case. Write the advantages and disadvantages of hydrocarbon bases. Compare various types of paraffin based on their characteristics. Give the advantages of Bees wax as ointment base.

$$2+3+3+4+6+2 = 20$$

Bachelor of Pharmacy Examination 2019

(1st year 2nd Semester)

Pharmaceutics II

Time 3Hours

Full Marks: 100

Answer all parts of a question in one place. Answer any **Five** questions taking at least **Two** from each group

Group- B

4. Write short notes on: (a) Hydrocolloids and (b) Jelly. 10X 2 = 20
5. (a) Classify the disperse systems based on physical states of matter. Give one example of each.
(b) Classify the disperse systems based on the size of the dispersed particles. Give one example of each. Compare the characteristics of such systems. 8+12 = 20
6. (a) How do the dispersed particles acquire surface charge? Describe the different methods to produce flocculated particles in a suspension.
(b) Write the characteristics of an ideal suspension dosage form.
(c) What do you mean by **Structured vehicle** ?
(d) Under which conditions **Stokes' law** of sedimentation is applicable? 9+5+4+2 = 20
7. Answer the following questions:
- (a) Distinguish between **Dilute suspension** and **Concentrated suspension**.
- (b) How will you assess redispersibility of a suspension?
- (c) Why reduction of particle size of hydrophobic solids leads to re-aggregation?
- (d) What is **Stokes' law** of sedimentation?
- (e) Write the formula for determining **Sedimentation volume** and **Degree of flocculation**.
- (f) Write one example of each of the following: Oral suspension, Intramuscular suspension, Topical suspension, Ophthalmic suspension.
- (g) What do you mean by **Thixotropy**?
- (h) What do you mean by **Caking of suspension**?
- (i) Why water is not added directly in hydrocolloid
- (j) Write examples of hydrocolloids from: Plant, Mineral, Animal, Microorganism. 2X 10 = 20