

**BACHELOR OF PHARMACY EXAMINATION, 2023**

( 3<sup>rd</sup> Year, 1st Semester , Supplementary)

**INDUSTRIAL PHARMACY - I**

Time : Three hours

Full Marks : 75

**Note: 1. Answer ALL the questions.**

**2. Question 1 is Compulsory.**

**1. Answer the following questions.**

**10x2 Marks=20 Marks**

- a. Define preformulation.
- b. Explain bulk and tapped density.
- c. Define dissolution.
- d. Give two examples of primary surfactant use in shampoo.
- e. What is buccal tablets?
- f. Define propellant.
- g. What is the chemical formula of propellant 11?
- h. Give the definition of parenteral.
- i. Give two examples of antioxidants.
- j. Give two examples of tonicity modifiers.

**Long Answer Questions**

**2 x 10 Marks = 20 Marks**

**(Answer 2 out of 3)**

2. a). Write about the processing problems in tablet compression. 10
3. a). Define shampoo. 2
- b). Write the ingredients used to prepare shampoo with their functions. 8
4. a) Describe in detail about flash point, therapeutic, and toxic effect determination of aerosol.

[ Turn over

b). What are the limitations of parenteral products? [7+3]

**Short Answer Question**

**7 x 5 Marks = 35 Marks**

**(Answer 7 out of 9)**

- |   |   |
|---|---|
| 5. Classify cosmetics with examples.  | 5 |
| 6. Classify tablets with examples.  | 5 |
| 7. Write in short about the diluents useb in tablet formulation.  | 5 |
| 8. Differentiate cold cream and vanishing cream.  | 5 |
| 9. a) Describe the advantages of parenteral products.   | 2 |
| b) State different types of parenteral products.  | 3 |
| 10. a) Name some factors that can affect drug absorption from different dosage forms other than IV route. | 2 |
| b) After absorption, state the factors that affect the therapeutic effect of the drug.                    | 3 |
| 11. Discuss in details about water for injection and sterile water for injection.                         | 5 |
| 12. a) What are the different types of aerosol system?  | 2 |
| b) Explain the working of bag in can system product.  | 3 |
| 13. Explain <b>any one</b> of the evaluation techniques used for capsule preparation.                     | 5 |