

**DOCTOR OF PHARMACY**  
**First Year Pharm. D. : SUMMER : 2022**  
**SUBJECT: PHARMACEUTICS**

Day : Friday  
Date 06-May-2022

S-5725-2022

Time : 10:00 AM-01:00 PM  
Max. Marks: 70

**N.B.:**

- 1) **Q. No. 1 and Q. No. 5** are **COMPULSORY**. Out of the remaining attempt any **TWO** questions from Section-I and any **TWO** questions from Section-II.
- 2) Both the sections should be written in **SEPARATE** answer books.
- 3) Figures to the **RIGHT** indicate full marks.
- 4) Draw neat labeled diagrams **WHEREVER** necessary.

**SECTION-I**

- Q.1** A) Answer any **FOUR** of the following: **(08)**
- i) Define the following terms:  
i) Isotonic solutions                      ii) Compounding
  - ii) Enlist the importance of Nasal sprays over Nasal drops.
  - iii) Write the role and examples of Antioxidants and density modifying agents.
  - iv) Differentiate between liniments and lotions.
  - v) What is the direction and patient counselling for collodions?
  - vi) Write briefly about compounding methods of solutions.
- B) An adult dose of Nimesulide is 100 mg bid. What will be the dose for child weighing 30 kg? **(03)**
- Q.2** Explain in detail various factors affecting for the dose calculation. **(12)**
- Q.3** a) Define and explain various parts of prescriptions with suitable examples. **(07)**  
b) Define and classify the Granules. Enlist the advantages of granules over powder. **(05)**
- Q.4** Write notes on any **THREE** of the following: **(12)**
- a) Mouthwash and Gargles
  - b) Developmental changes of European pharmacopoeia
  - c) Different formulation ingredients used in the solutions
  - d) Historical background and development of profession of Pharmacy

**SECTION-II**

- Q.5** A) Answer any **FOUR** of the following: **(08)**
- i) Define and classify the types of suspension.
  - ii) What is the need of calibration of suppository? Explain briefly.
  - iii) Define and enlist the ideal characteristics of sutures and ligatures.
  - iv) Write the ideal characteristics of suppository bases.
  - v) Write the role and examples of Flocculating agents.
  - vi) Enlist the advantages of multiple emulsion over simple emulsion.
- B) Explain briefly about the principle of extraction. **(03)**
- Q.6** Define the term incompatibility. Explain in detail about the therapeutic incompatibility. **(12)**
- Q.7** a) Define and classify the term sutures and ligature. Write briefly about Absorbable sutures. **(07)**  
b) Write briefly about the physical stability of suspension. **(05)**
- Q.8** Write notes on any **THREE** of the following: **(12)**
- a) Identification tests for emulsion
  - b) Percolation
  - c) Factors affecting the rate of extraction
  - d) Steps involved in compounding of cocoa butter suppository