Dear Sir/Madam,

Received with thanks the following **Semester/Periodic** question papers from your exam cell:

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**Note:** SC – Softcopy, HC - Hardcopy

(Shaheen Ansari)
Librarian, AIKTC
Q.1 Write a note on Proteomics? [04M]

Q.2 Write a note on enzyme Inhibitors against microorganisms, viruses, body's own enzymes. [04M]

Q.3 Explain in brief about Intermolecular bonding forces like electrostatic, hydrogen bonding, van der Waal's interactions, dipole-dipole and ion-dipole interactions and hydrophobic interactions. [04M]

Q.4 Write a note on lipids, carbohydrates, proteins and nucleic Acids as drug targets. [03M]
Questions

1. **Justify your answer with proper examples.**
   
   i) Amino group –NH₂ act as auxochrome: True or false
   
   ii) Write any two differentiating points of Fluorimetry and UV-visible spectroscopy
   
   iii) Write the relationship between wave number and wavelength
   
   iv) Define Monochromator and its applications
   
   v) Amax of any drug changes with its concentration: True or False

2. **Explain in detail**
   
   i) Explain in detail about chemical derivatization in Fluorimetry with proper example and its structure
   
   (2 M)

   (or)

   ii) Write in detail about sample preparation method in IR spectroscopy
   
   (2 M)

   ii) A 1% cm of paracetamol at its wavelength maximum is 715. Paracetamol standard 150 mg was dissolved in 100ml (Stock solution A). 1 ml of Solution A was pipette out and further diluted to 10ml (Sample solution B) gave an absorbance of 0.703 at max when measured in 1cm cell. Calculate the concentration of drug in g/100ml
   
   (3 M)

3. **Explain in detail about**
   
   i) Sodium in blood fluid is determined by spectroscopy. Explain the working principle, instrumentation and application of this spectroscopy in detail. Write any one Atomizer technique involved in this spectroscopy in detail?
   
   (or)

   (5 M)

   (or)

   ii) Discuss measurement of rate constant using UV-Visible spectroscopy
   
   (3 M)

   ii) What is cationic interference in AES? Give specific methods to overcome them?
   
   (2 M)
Q I) Discuss in brief the effect of polymorphism on tablet compression. [2]

(OR)

Discuss the effect of granule flow properties on tablet weight uniformity.

Q II) Explain wet granulation process in manufacturing of tablets. List all equipments used in conventional techniques of wet granulation. [4]

Q III) Discuss capping and lamination in tablet manufacturing. [3]

Q IV) Write Short notes on (Any 3) [6]

a. Chilsonator
b. Directly compressible diluents
c. Single Punch tabletting process
d. Mottling in tablets

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1. Write in brief different types of classification and function of Hospital  

2. Write a note on **Pharmaceutical care.**

**OR**

**Drug & Therapeutics Committee**

3. Explain professional role and functions of retailers.  

4. What are code of ethics of pharmacist in relation to his profession  

5. Write short note on sole proprietorship  

**OR**

Hindu undivided family business  

6. Give the classification of middlemen /agents involved in channels of distribution.
NOTE: Draw Diagram and Structures wherever applicable

1. **State True or False and justify your answer**
   
a) Biological classification is based on the chemical constituents of the drug.  
b) The term ‘recurved’ is used to describe the macroscopy of a fruit.  
c) Dried latex Juices is an example of unorganized drug.

2. **Differentiate between**
   
a. Gums and Mucilage  
b. Cymose inflorescence and racemose inflorescence

3. **Compare and contrast Acacia and Tragacanth gum**

4. **Discuss in detail morphological or microscopically features of Leaf**

**OR**

Explain in detail one mucilage containing drug obtained from seeds

5. **Explain dried latex and dried extract**

6. **Discuss calcium oxalate crystals**

**OR**

Discuss the Biological source, chemical constituent, chemical test and uses of silk