QP Code: 721006 **Reg. No……**

Seventh Semester B. Pharm Degree Regular/Supplementary Examinations September 2024
Instrumental Methods of Analysis
(2017 Scheme)

Time: 3 Hours **Max. Marks: 75**

- ***Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space***
- ***Answer all parts of a single question together • Leave sufficient space between answers***
- ***Draw diagrams wherever necessary***

Essays **(2x10=20)**

1. Write a note on solid sample handling in Infra-Red Spectroscopy
2. List various types of electrophoresis techniques. Explain any two which are relevant to Pharmaceutical Analysis

Short Notes **(7x5=35)**

3. Write a note on deviations from Beer Lambert's equation
4. Write a note on various types of photometric titrations with examples
5. Explain the differences between thermocouple and thermistors as Infra-Red detectors
6. Explain the principle of adsorption and partition chromatography giving suitable examples
7. Write a note on development techniques in paper chromatography
8. What is temperature programmed gas chromatography. Explain the working of a detector which can be used in the same
9. Explain the principle of gel filtration

Answer Briefly **(10x2=20)**

10. Define auxochrome with an example
11. What are singlet and doublet transition states
12. Name any four types of vibrations in Infra-Red Spectroscopy
13. Name any two oxidants used in flame photometry
14. Which type of compounds can be estimated using atomic absorption spectroscopy
15. Write the formula calculate Height Equivalent to Theoretical Plates
16. List one major advantage and one major disadvantage of polymer as a support phase in High Performance Thin Layer Chromatography
17. Name the types of columns used in Gas Chromatography
18. List the dimensions commonly used columns in High Performance Liquid Chromatography
19. Name any two stationery phases used in Ion Exchange Chromatography

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QP Code: 722006 **Reg. No……**

Seventh Semester B. Pharm Degree Regular/Supplementary Examinations September 2024
Industrial Pharmacy
(2017 Scheme)

Time: 3 Hours **Max. Marks: 75**

- ***Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space***
- ***Answer all parts of a single question together • Leave sufficient space between answers***
- ***Draw diagrams wherever necessary***

Essays **(2x10=20)**

1. Discuss the role of good documentation practice in pharmaceutical industry
2. Write a note on technology transfer protocol. Write the salient features of SUPAC guidelines

Short Notes **(7x5=35)**

3. What is analytical method transfer
4. What is COPP
5. Write a note on drug development process
6. Write notes on investigator's brochure
7. Write the role and responsibilities of Pharmaceutical Regulatory affairs professionals.
8. Technology transfer agencies in India
9. Importance of plant location and layout in pharmaceutical industry

Answer Briefly **(10x2=20)**

10. What are the contents of NDA application
11. Module III of CTD
12. What is clinical trial protocol
13. Establish the relationship between generics and ANDA
14. How does an INDA application contribute to drug development
15. Functions of CDSCO
16. What is qualification and validation
17. What is confidentiality agreement
18. What is MOU
19. Mechanical Hazards

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QP Code: 723006 **Reg. No……**

Seventh Semester B. Pharm Degree Regular/Supplementary Examinations September 2024
Pharmacy Practice

(2017 Scheme)

Time: 3 Hours **Max. Marks: 75**

- ***Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space***
- ***Answer all parts of a single question together • Leave sufficient space between answers***
- ***Draw diagrams wherever necessary***

Essays **(2x10=20)**

1. Discuss composition, functions and policies of pharmacy and therapeutic committee.
2. Discuss ABC and VED method for analysis of inventory control of drugs in pharmacy.

Short Notes **(7x5=35)**

3. Functions and responsibilities of hospital pharmacists.
4. Advantages of hospital formulary system.
5. Unit dose dispensing system of drug distribution in hospital.
6. Genesis of the concept of clinical pharmacy.
7. Differentiate between poison information and drug information centers.
8. Rational use of antibiotics.
9. Drug therapy management of rheumatoid arthritis.

Answer Briefly **(10x2=20)**

10. Classify hospitals based on the objectives.
11. Contents of hospital formulary.
12. Floor stock system of drug distribution.
13. Define pharmaceutical care.
14. Need for therapeutic drug monitoring.
15. Consequences of medication non-adherence.
16. Type “A” adverse drug reaction with example.
17. Buffer stock.
18. Enlist any two pulmonary function tests with its clinical significance.
19. Role of insulin therapy in diabetes mellitus.

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QP Code: 724006 **Reg. No……**

Seventh Semester B. Pharm Degree Regular/Supplementary Examinations September 2024
Novel Drug Delivery Systems

(2017 Scheme)

Time: 3 Hours **Max. Marks: 75**

- ***Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space***
- ***Answer all parts of a single question together • Leave sufficient space between answers***
- ***Draw diagrams wherever necessary***

Essays **(2x10=20)**

1. Define microencapsulation. Discuss the process of microencapsulation by various methods with examples and applications
2. Discuss the formulation considerations of Buccal delivery systems

Short Notes **(7x5=35)**

3. What are monoclonal antibodies. Mention their applications.
4. Explain the formulation design of "Alzet Osmotic Pump" with a neat labelled diagram
5. What are niosomes. Explain the structural components of niosomes.
6. Briefly explain the applications of polymers in the formulation of controlled-release drug delivery systems.
7. What are ophthalmic inserts. Explain the design aspects of the Ocusert system.
8. What is Nanoparticle drug delivery system. Write its advantages and disadvantages
9. What are inhalers. Add a brief note on pressurised metered dose inhalers

Answer Briefly **(10x2=20)**

10. Differentiate between biodegradable and non-biodegradable polymers
11. Write the limitations of conventional ocular preparations
12. Write the role of cholesterol in the formulation of liposomes
13. What is the type of polymers used in implantable drug delivery systems
14. Define microspheres
15. What are transdermal patches
16. What do you understand by the terms mucoadhesion and bioadhesion
17. List out the approaches used in the design of gastro-retentive drug delivery systems
18. What are ion-exchange resins
19. What are permeation enhancers. Give examples

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