QP Code: 721006 **Reg. No…….**

Seventh Semester B. Pharm Degree Regular/Supplementary Examinations February 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. Explain the principle, instrumentation and applications of atomic absorption spectroscopy.
2. With the help of a schematic diagram, discuss the instrumentation of Gas Chromatography. Explain in detail the principle of thermal conductivity detector.

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

3. Enlist and explain the types of shifts observed in UV-spectrum with suitable examples.
4. Factors affecting fluorescence.
5. Write the principle of IR spectroscopy.
6. With the help of Van Deemter Equation, explain the factors affecting efficiency of a chromatographic separation.
7. Explain the development and detection techniques used in TLC.
8. What is derivatization in GC. Explain the types and methods of derivatization.
9. What is electrophoresis. Write the principle and procedure for Gel Electrophoresis.

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

10. What are the electronic transitions in spectroscopy
11. What are chromophores in UV Spectroscopy. Give examples for chromophoric groups.
12. Explain why Fluoresence spectroscopy is called molecular emission spectroscopy.
13. What are the different types of detectors used in HPLC.
14. What is tailing and fronting in chromatography. Explain with suitable diagrams.
15. Differentiate between the terminologies Elution, Eluent and Eluate.
16. What is the composition of the stationary phase in a Cation exchange chromatography. Give an example.
17. Explain the advantages of HPTLC over TLC.
18. What is the principle of size exclusion chromatography. Write any two applications.
19. Any two applications of Nepheloturbidometry.

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QP Code: 722006 **Reg. No……**

Seventh Semester B. Pharm Degree Regular/Supplementary Examinations February 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. Explain general consideration of pilot plant scale up techniques for solid dosage forms.
2. Explain role and responsibility of regulatory affairs professionals.

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

3. Explain the requirements for plant location and layout of a pharmaceutical industry.
4. General considerations of Investigational New Drug (IND) application.
5. Describe about COPP.
6. Explain in detail about APCTT.
7. Regulatory requirements and approval procedure for new drugs.
8. Explain pharmaceutical hazards and their safety.
9. Explain technology development and transfer for granularity of TT process.

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

10. What are SUPAC guidelines.
11. Mention TT agencies in India.
12. What are Data presentation for FDA submissions.
13. Explain CDSCO.
14. What is platform technology.
15. Define commercialization and problems.
16. What are confidentiality agreements.
17. List out the five modules of common technical document.
18. Components of an investigators brochure.
19. Define transfer of technology.

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QP Code: 723006 **Reg. No……**

Seventh Semester B. Pharm Degree Regular/Supplementary Examinations February 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. Explain the purchase procedure of drugs in a hospital pharmacy of a large hospital.
2. Write about guiding principles and the contents of a typical hospital formulary.

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

3. Haematological function tests.
4. Roles and responsibilities of community pharmacist.
5. Ward round participation.
6. Briefly explain the need for patient medication history interview.
7. Reporting of adverse drug reactions.
8. Different methods of inventory control.
9. Explain the factors to be considered while doing therapeutic drug monitoring.

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

10. What are the steps involved in patient counseling.
11. Tertiary information resources for drug information.
12. Functions of Hospital Pharmacists.
13. Use of insulin in the management of diabetes mellitus.
14. Legal requirements for establishing community pharmacy.
15. Objectives of clinical pharmacy services.
16. Role of liver enzymes in hepatic diseases.
17. Enumerate the classes of drugs used in the management of congestive cardiac failure.
18. Write the formula for economic order quantity.
19. Define the terms ‘purchase’ and ‘inventory’ control.

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QP Code: 724006 **Reg. No……**

Seventh Semester B. Pharm Degree Regular/Supplementary Examinations February 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. Write the applications of Transdermal Drug Delivery Systems (TDDS). Discuss on various approaches for design of Transdermal Drug Delivery Systems(TDDS) with suitable examples (2+8)
2. Explain the concepts and various approaches for targeted drug delivery systems with suitable examples

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

3. Explain on permeation enhancers with suitable examples
4. Explain the concept of mucosal drug delivery systems
5. Role of polymers in drug delivery.
6. Explain the rationale of selecting drug candidates for controlled drug delivery.
7. Discuss the ideal formulation consideration of buccal patches
8. Explain the need for drug targeting
9. Outline the need for pulmonary drug delivery system

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

10. Write the limitations of controlled drug delivery systems
11. Mention the merits and demerits of buccal strips
12. Differentiate diffusion and dissolution type controlled drug delivery systems.
13. Enlist the ideal drug candidate for gastro-retentive drug delivery system
14. Explain on coacervation phase separation technique
15. Name any two categories of marketed inhalers with examples
16. Write the applications of monoclonal antibodies
17. Mention the importance of crosslinking agent in polymers
18. Write the applications of osmotic pump
19. Mention the applications of nasal drug delivery system

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