

QP Code: 721006

Reg. No.....

**Seventh Semester B. Pharm Degree Regular/Supplementary
Examinations August 2025
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 briefly the instrumentation of double beam UV-Visible Spectrophotometer.
2. Explain the different sampling techniques in IR spectroscopy.

Short Notes

(7x5=35)

3. Explain the estimation of non-fluorescent compound by Fluorimetry.
4. Applications of Atomic absorption spectroscopy.
5. Explain the burners used in Flame photometry.
6. Explain the factors affecting electrophoretic mobility in Electrophoresis.
7. Mention the carrier gases used in gas chromatography and give their merits and limitations.
8. Classify and explain different types of columns used in HPLC.
9. Enumerate the column efficiency parameters in column chromatography.

Answer Briefly

(10x2=20)

10. Define gradient elution.
11. Write a note on adsorbents used in HPTLC.
12. List the types of Whatman filter papers and their applications in Paper Chromatography.
13. Write a note on frontal analysis.
14. Write the difference between Nephelometry and Turbidimetry.
15. Expand and explain HETP.
16. What is Absorption maxima and mention its significance.
17. Write the difference between Normal Phase and Reverse Phase chromatography.
18. Explain anion exchange resins.
19. Write the principle of separation in Gel chromatography.

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**Seventh Semester B. Pharm Degree Regular/Supplementary
Examinations August 2025
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 in detail about pilot plant scale up considerations for solid dosage forms.
2. Discuss in detail about Central Drug Standard Control Organization (CDSCO).

Short Notes

(7x5=35)

3. Discuss about Technology Transfer related documentation.
4. Elaborate Platform technology.
5. Discuss about Investigator's Brochure in clinical studies.
6. Discuss the NDA regulatory approval process.
7. Describe COPP.
8. Enumerate the responsibilities of state licensing authority.
9. Discuss about plant location and layout in relation to Industrial safety.

Answer Briefly

(10x2=20)

10. Write about GMP considerations in pilot plant scale up.
11. Describe Technology Transfer protocol.
12. List out the role of regulatory affairs.
13. Define clinical trial according to CDSCO.
14. Define SUPAC.
15. List out the drug testing laboratories.
16. Expand BCIL and APCTT.
17. Highlight the components of non-clinical drug development.
18. Define Analytical method transfer.
19. Define ANDA.

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Reg. No.....

**Seventh Semester B. Pharm Degree Regular/Supplementary
Examinations August 2025
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 role of Pharmacy and Therapeutic Committee (PTC) in the development of hospital formulary, adverse drug reaction and emergency drug list preparation
2. Define Patient Counseling. Explain the steps in patient counseling and communication skills needed for counseling.

Short Notes

(7x5=35)

3. Responsibilities and functions of hospital pharmacist
4. Pharmacotherapy of Asthma
5. Drug Therapy Monitoring
6. Various types of ward rounds
7. Classification of drugs stocked in drug store and storage conditions
8. Liver Function Test
9. Types of drug distribution systems in hospitals

Answer Briefly

(10x2=20)

10. What is medication history interview
11. Write the role of streptokinase in myocardial infarction
12. Explain the side effects of Rifampicin
13. Write the concept of pharmaceutical care
14. Define: Adverse Drug Reaction (ADR)
15. What is Economic Order Quantity (EOQ)
16. What is Over the Counter (OTC) drugs
17. What is automatic stop order
18. Sources of drug information
19. Legal requirements of a prescribed medication order

QP Code: 724006

Reg. No.....

**Seventh Semester B. Pharm Degree Regular/Supplementary
Examinations August 2025
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. Discuss the application of polymers in the formulation of controlled-release drug delivery systems.
2. Explain the factors affecting the permeation of the drug through the skin. Describe any one type of transdermal drug delivery system with a neat diagram

Short Notes

(7x5=35)

3. What are ion exchange resins. Explain the ion exchange drug delivery system with suitable examples.
4. Discuss the methods of microencapsulation by coacervation phase separation technique with suitable examples.
5. What are implantable osmotic pumps and explain with suitable examples.
6. What are the ideal characteristics of Ocular Drug Delivery Systems.
7. State the applications of the naso-pulmonary drug delivery system. Discuss the formulation of metered dose inhalers.
8. Write the various approaches for gastro retention of the drug delivery system.
9. What is liposome drug delivery system. Write its advantages and disadvantages.

Answer Briefly

(10x2=20)

10. Write the advantages of targeted drug delivery systems
11. What are monoclonal antibodies
12. Write short notes on Dissolution Controlled Oral Drug delivery systems
13. What are ocuserts
14. Write two techniques in the production of microparticles
15. Enlist the commonly used preservatives in ophthalmic products
16. Mention the basic components of transdermal drug delivery systems
17. What are permeation enhancers. Give examples
18. Write the merits and demerits of subdermal implants
19. What are microcapsules.
