

QP Code: 423006

Reg. No.....

**Fourth Semester B.Pharm Degree Supplementary Examinations
March 2026**

Physical Pharmaceutics II

(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 formulation aspects of stable suspension with examples.
2. Classify colloids and discuss their optical and kinetic properties.

Short Notes

(7x5=35)

3. Explain accelerated stability testing for the calculation of shelf life of the drug products.
4. Explain the effect of ionic strength and dielectric constant on stability of pharmaceutical products.
5. How does the thixotropic behaviour affect the stability of the coarse dispersion.
6. Explain the working of falling sphere viscometer.
7. Explain the mechanism of caking of suspension.
8. Explain any Four theories of emulsification.
9. What are the pharmaceutical applications of the colloids. explain.

Answer Briefly

(10x2=20)

10. What are Non-Newtonian systems.
11. Write Heckel equation.
12. What is creaming of emulsion.
13. Explain surface free energy.
14. What is peptization.
15. What is Kraftt point.
16. What is the Faraday -Tyndall effect.
17. Explain Bulges and Spurs in the Rheogram.
18. What is negative thixotropy.
19. Explain micellar solubilization.

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Fourth Semester B.Pharm Degree Supplementary Examinations
March 2026
Pharmacology I
(2017 Scheme)

Time: 3 Hours

Max. Marks: 75

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- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

Essays

(2x10=20)

1. Describe the pharmacological actions, therapeutic uses and adverse effects of Atropine
2. Define pharmacokinetics. Explain in detail about enzyme induction and enzyme inhibition.

Short Notes

(7x5=35)

3. Mechanism of Action, adverse effects and 2 drug interactions of Levodopa
4. Explain in detail about membrane transport.
5. Define and classify anti-psychotics.
6. Factors affecting drug absorption.
7. Classify local anaesthetics. Write their mechanism of action
8. Explain the different phases of clinical trials.
9. Define a) Drug addiction b) Drug abuse c) Drug tolerance d) Drug interaction

Answer Briefly

(10x2=20)

10. Differentiate between Agonists and Antagonists.
11. Tachyphylaxis.
12. Adverse drug reactions.
13. Classification of anti-anxiety agents.
14. Classify anti-epileptics.
15. Functions of ANS.
16. General anaesthetics.
17. Differentiate acute and chronic toxicity.
18. Opioid analgesics and antagonists.
19. Spare receptors.

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**Fourth Semester B.Pharm Degree Supplementary Examinations
March 2026**

Pharmacognosy and Phytochemistry I

(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. Briefly explain the types of plant tissue culture. Discuss the various applications of plant tissue culture in Pharmacognosy
2. Explain in detail about evaluation of crude drugs by organoleptic and microscopic methods

Short Notes

(7x5=35)

3. Differentiate between organized and unorganized crude drugs
4. Enumerate about the factors effecting the cultivation of medicinal plants.
5. Write a note on cannabis
6. What are edible vaccines. Write their advantages
7. Write the biological source, chemical constituents and uses of Agar
8. Explain in detail about starch
9. Define and classify the glycosides. Explain the identification tests for steroidal glycosides.

Answer Briefly

(10x2=20)

10. Write about the different sources of drugs
11. Define and classify resins with examples
12. Illustrate the applications of plant hormones
13. Write a note on colchicine
14. Write the biological source, chemical constituents and uses of Tobacco
15. What are proteolytic enzymes. Give the source and uses of any two proteolytic enzymes
16. Explain the principle of Siddha system of medicine
17. Write the identification tests for detection of Tannins
18. Explain about biological source, chemical constituents and uses of Honey
19. Write about the polyploidy
