

(BP 501 T)

III/IV B.PHARMACY DEGREE EXAMINATION,
APRIL/MAY 2024.

(Regular)

Fifth Semester

Paper I — MEDICINAL CHEMISTRY II — THEORY

Time : Three hours

Maximum : 75 marks

SECTION A — (5 × 10 = 50 marks)

Answer any FIVE questions.

1. Define and classify antihistaminic agents with examples and give the synthesis of diphenhydramine HCl.
2. Write a note on antianginal agents. Explain the synthesis of Isosorbide dinitrite.
3. What are antiarrhythmic drugs? Write the structure and uses of procainamide HCl, phenytoin sodium, lidocaine HCl and amiodarone.
4. Define antihyperlipidemic agents. Write the structure and uses of clofibrate, lovastatin, cholestamine and cholestipol.

5. Define antidiabetic drugs. Write the structure and uses of metformin, pioglitazone, glipizide and acarbose.
6. Discuss about the medicinal importance of Corticosteroids and give the structures and uses of any two Corticosteroids.
7. Discuss in brief about vasodilators and outline the synthesis of Nitroglycerine.

SECTION B — (5 × 5 = 25 marks)

Answer any FIVE questions.

8. Write the synthesis and uses of any one H₂ antagonists.
9. What are gastric proton pump inhibitors? Write the structure of omeprazole.
10. Outline the synthesis of disopyramide phosphate.
11. Write a note on Insulin and its derivatives.
12. Write the structure and uses of synthetic estrogens
13. Write the synthesis of Dibucaine. Give the structure of any two antithyroid drugs.
14. List the names and uses of anticancer antibiotics.

(BP 502 T)

III/IV B.PHARMACY DEGREE EXAMINATION,
APRIL/MAY 2024

(Regular)

Fifth Semester

Paper II – INDUSTRIAL PHARMACY I – THEORY

Time : Three hours

Maximum : 75 marks

SECTION A — (5 × 10 = 50 marks)

Answer any FIVE questions.

1. What is a pre-formulation study? Discuss in details about pre-formulation goal, objectives and physico-chemical properties of drug substance.
2. Define tablet coating, write the types of coating and explain the film coating composition.
3. Discuss any two quality control tests for capsules. Explain nature of soil gelatin capsule content.
4. Discuss in detail the production facilities for parenterals.

5. Explain the manufacturing of ophthalmic ointment and describe formulation of ophthalmic suspensions.
6. Write the principle involved in the formation of creams. Discuss various alkalies used in cream formulation. Write a note on nail lacquers.
7. Explain importance of solubility, dissociation constant and partition co-efficient of drug in development of solid dosage forms.

SECTION B — (5 × 5 = 25 marks)

Answer any FIVE questions.

8. Write BCS classification of drugs and its significance.
9. Describe formulation of chewable and sublingual tablets.
10. Differentiate between hard gelatin and soft gelatin capsule. Which capsule number is largest capacity for powder filling?
11. Write the specifications and methods of preparation of WFI.

12. Explain the formulation of eye drops.
13. Describe the stability testing methods for pharmaceutical aerosols.
14. Define cream write the formulation of foundation cream.

(BP 503 T)

III/IV B.PHARMACY. DEGREE EXAMINATION,
APRIL/MAY 2024.

(Regular)

Fifth Semester

Paper III — PHARMACOLOGY II — THEORY

Time : Three hours

Maximum : 75 marks

SECTION A — (5 × 10 = 50 marks)

Answer any FIVE questions.

1. Explain the pharmacological actions, adverse reactions and clinical uses of digitalis.
2. Classify the Non steroidal Anti inflammatory drugs. Discuss the mechanism of action and adverse effects of Aspirin.
3. Classify Antihypertensive drugs with examples. Describe the pharmacology of Nifedipines.
4. Describe the pharmacology of histamine.
5. Describe the general methods of bioassay and explain the bioassay of digitalis.

6. Write the mechanism of pharmacological actions. Therapeutic uses and adverse effects of Salicylates.

7. Write in detail about corticosteroid hormones.

SECTION B — (5 × 5 = 25 marks)

Answer any FIVE questions.

8. Describe the mechanism of calcium channel blockers.
9. Write pharmacology of NSAIDS.
10. Write the MOA and adverse effects of Prednisolone.
11. Write the pharmacology of drug acting on Uterus.
12. Write the pharmacology of propylbiouracil.
13. Write pharmacology of Coagulants.
14. Write a short note on drug used in therapy of shock.

(BP 504 T)

III/IV B.PHARMACY DEGREE EXAMINATION,
APRIL/MAY 2024.

(Regular)

Fifth Semester

Paper IV — PHARMACOGNOSY AND
PHYTOCHEMISTRY – II THEORY

Time : Three hours

Maximum : 75 marks

SECTION A — (5 × 10 = 50 marks)

Answer any FIVE questions.

1. Explain the different methods for illustration of biosynthetic pathways.
2. Write the biological source, morphology, microscopy, active principles, uses adulterants and substitutes of Belladonna.
3. Describe the Industrial production and estimation of Caffeine and Digoxin.
4. Describe the industrial production and estimation of Vincristine and Atropine.

5. Write about application of Chromatographic techniques in the isolation, purification and identification of crude drugs.
6. Discuss briefly about Isolation, Identification and Analysis of Menthol.
7. Explain in detail about Super critical fluid extraction and solid phase extraction.

SECTION B — (5 × 5 = 25 marks)

Answer any FIVE questions.

8. Write a detailed note on Shikimic Acid Pathway.
9. Discuss chemistry and commercial applications of Lignans.
10. Describe isolation and Analysis of Curcuma.
11. Describe Industrial production and estimation of Artemisinin.
12. Application of HPTLC on the isolation and identification of crude drugs.
13. Write composition, chemical class and therapeutic uses of pterocarpus.
14. Discuss about isolation of Rutin and Citral.