

BP 501 T

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III/IV B. PHARMACY DEGREE EXAMINATIONS, APRIL/MAY - 2023

Fifth Semester

MEDICINAL CHEMISTRY - II - THEORY

Time : **Three Hours**

Maximum : **75 Marks**

SECTION - A

Answer any FIVE Questions.

5x10 = 50 M

1. Write the chemical classification of H₁ - antagonists with examples and their structures. Mention the synthesis and uses of Diphenhydramine hydrochloride.
2. Classify Antihypertensive drugs. Write a note on the SAR and mechanism of action of drugs acting on Renin angiotensin system.
3. Write the synthesis and mechanism of action of
 - a) Warfarin.
 - b) Disopyramide phosphate.
4. Discuss the nomenclature and stereochemistry of steroids.
5. Write the SAR of Local anesthetics and explain the synthesis and uses of Procaine.
6. Give an account on
 - a) Antithyroid drugs.
 - b) Calcium channel blockers.
7. Enumerate the mode of action and synthesis of
 - a) Mechllorethamine.
 - b) Methotrexate.

SECTION - B

Answer any FIVE Questions.

5x5 = 25 M

8. Write the structure, IUPAC Name, mechanism of action and therapeutic uses of Pantoprazole.
9. Briefly outline the SAR of Carbonic Anhydrase Inhibitors and enumerate the synthesis of Acetazolamide.s
10. Classify Antihyperlipidemic agents with examples.
11. Write the structures of following :
 - a) Prednisolone.
 - b) Testosterone.
 - c) Hydrocortisone.
 - d) Digoxin.
 - e) Diethyl stibestrol.
12. Write the classification of Antidiabetic drugs and outline synthesis of Tolbutamide.
13. Write a short note on Oral contraceptives.
14. Give an account on plant products used as antineoplastic agents.

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III/IV B. PHARMACY DEGREE EXAMINATIONS, APRIL/MAY - 2023

Fifth Semester

INDUSTRIAL PHARMACY - I - THEORY

Time : Three Hours

Maximum : 75 Marks

SECTION - A

Answer any FIVE Questions.

5x10 = 50 M

1. Enlight about goals & objectives of preformulation studies and write a note on chemical properties of drug substance.
2. Discuss about different granulation methods of tablets & add a note on equipment used for compression of tablets.
3. Explain the following.
 - a) Formulation of coating composition.
 - b) In process quality control tests for tablets.
4. a) Describe capsule content & size of soft gelatin capsules.
b) Write significance of base adsorption & minim / gram factors.
5. Write a note on production procedure & production facilities for aseptic processing parenteral products.
6. a) Explain formulation considerations of ophthalmic preparations.
b) Give a note on evaluation of aerosols.
7. Enumerate the factors influencing choice of containers and also mention about stability aspects of packaging materials.

SECTION - B

Answer any FIVE Questions.

5x5 = 25 M

8. Mention applications of preformulation considerations in the development of liquid and dosage forms.
9. Explain about formulation & manufacturing considerations of emulsions.
10. Discuss the method of preparation of Eye ointments.
11. List out physico chemical characteristics of drug substance and write significance of polymorphism & particle size.
12. Write a note on formulation of coating solution defects in coating.
13. List out & write uses of each component in the preparation of Lipsticks ?
14. Define isotonicity & add a note on additive used to adjust the pH of the parenteral products.

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III/IV B. PHARMACY DEGREE EXAMINATIONS, APRIL/MAY - 2023

Fifth Semester

PHARMACOLOGY - II - THEORY

Time : Three Hours

Maximum : 75 Marks

SECTION - A

Answer any FIVE Questions.

5x10 = 50 M

1. Give the classification of drugs used in congestive heart failure. Write the pharmacological profile of Cardiac glycosides.
2. Write the classification of drugs acting on Haemopoietic system. Give brief pharmacology of Coumarin derivatives.
3. Discuss the pharmacological profile of Aspirin. Add a note on NSAID's classification with examples.
4. Discuss the profile of DMARD's for treatment of Rheumatoid arthritis.
5. Describe the synthesis, storage, release and metabolism of thyroid hormones.
6. Classify Hypoglycaemic agents with relevant examples. Write the MOA, Adverse effects and uses of Biguanides.
7. Elaborate the methods used for Bioassay of Insulin. Add a note on three point Bioassay.

SECTION - B

Answer any FIVE Questions.

5x5 = 25 M

8. Angiotensin antagonists pharmacology.
9. Write briefly about the following Losartan.
10. Nicorandil.
11. Bile acid sequestrants.
12. Thiazide diuretics.
13. Pharmacology of Ketorolac.
14. Types of Bioassay with diagrammatic graph.

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III/IV B. PHARMACY DEGREE EXAMINATIONS, APRIL/MAY - 2023

Fifth Semester

PHARMACOGNOSY & PHYTOCHEMISTRY - II - THEORY

Time : **Three Hours**

Maximum : **75 Marks**

SECTION - A

Answer any FIVE Questions.

5x10 = 50 M

1. Explain the formation of secondary metabolites through acetate path way.
2. Discuss in detail about Biosources, composition, chemistry and therapeutic uses of phenyl proteinoids & flavanoids.
3. Describe chemistry, chemical classes, therapeutic uses and commercial application Ginger, Myrrh & Colophony.
4. Explain the method of isolation & identification of phyto constituents present in Quinine & Reserpine.
5. Explain process of industrial production, estimation & utilisation of Atropine, Diosgenin & Podophyllotoxin.
6. Give a detail note on isolation, purification & identification of crude drugs using thin layer chromatography.
7. Write in detail about following drugs.
 - a) Aloes 3Y2M.
 - b) Bitter almond 3Y2MC. Guggul.

SECTION - B

Answer any FIVE Questions.

5x5 = 25 M

8. What are secondary metabolites ? Write their significance.
9. Explain composition & chemistry of volatile oils.
10. What are terpenoids & write their biosources & commercial applications?
11. Enlight the process of identification of alkaloids.
12. Describe the estimation protocol for Digoxin & Caffiene.
13. Define spectroscopy & classify different spectroscopic techniques & mention applications of spectroscopy.
14. Explain the principle & applications of chromatographic techniques.

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III/IV B. PHARMACY DEGREE EXAMINATIONS, APRIL/MAY - 2023

Fifth Semester

PHARMACEUTICAL JURISPRUDENCE - THEORY

Time : Three Hours

Maximum : 75 Marks

SECTION - A

Answer any FIVE Questions.

5x10 = 50 M

1. a) Describe the functions and composition of a Joint Pharmacy Council.
b) Write a note on Drug Enquiry Committee.
2. Discuss salient features of Drugs and Magic remedies act.
3. What is code of pharmaceutical ethics ? Explain code of pharmaceutical ethics of pharmacist in relation to his job & profession.
4. a) Explain the prohibition of manufacture and sale of certain drugs.
b) Write a note on loan license.
5. Explain about education regulations, constitution & functions of PCI.
6. Write a note on Hathi committee and Mudaliar committee.
7. Give an account on Intellectual Property Rights.

SECTION - B

Answer any FIVE Questions.

5x5 = 25 M

8. Write about the provisions related to the cultivation of opium poppy.
9. Give an account on Right to Information Act.
10. Write about MAPE.
11. Explain the duties of drug inspector.
12. Write about MTP act.
13. Who is Lambardar and what are the duties of Lambardar.
14. Mention the regulations relating to ayurvedic preparations under Medicinal & Toilet Preparations Act.