



Code No: G-13097/PCI

**FACULTY OF PHARMACY**

**B. Pharm (PCI) V - Semester (Main & Backlog) Examination, March 2025**

**Subject: Pharmacology-II**

**Time: 3 Hours**

**Max. Marks: 75**

**PART - A**

**Note: Answer all the questions.**

**(10 x 2 = 20 Marks)**

1. Explain the MOA of digoxin.
2. What are antiarrhythmic drugs and give examples?
3. What are the therapeutic uses of vit k?
4. Define and write the therapeutic uses of fibrinolytics.
5. Give examples and write the therapeutic uses of 5-HT<sub>3</sub> antagonists.
6. What is thyroxine and write its therapeutic uses.
7. What are the therapeutic uses of prostaglandin analogs?
8. What are anabolic steroids and write their therapeutic uses?
9. Define bioassay. List out the types of bioassays.
10. Classify the drugs used for gout.

**PART - B**

**Note: Answer any two questions.**

**(2 x 10 = 20 Marks)**

11. (a) Define and classify antihypertensives.  
(b) Write the mechanism of action, adverse drug reactions and therapeutic uses of ACE inhibitors.
12. (a) Define and classify Oral hypoglycemic agents.  
(b) Write notes on insulin preparations.
13. What are the methods of bioassay of insulin? Discuss any two methods in detail.

**PART - C**

**Note: Answer any seven questions.**

**(7 x 5 = 35 Marks)**

14. Classify antianginal drugs. Write the therapeutic uses of organic nitrates.
15. Classify antihyperlipidemic. Discuss about statins.
16. Write short notes on hematinics.
17. Classify diuretics. Write the MOA and therapeutic uses of loop diuretics.
18. Classify autocoids and write the pharmacology of histamine.
19. Write the pharmacological actions and therapeutic uses of thyroid hormones.
20. Write short notes on antirheumatic drugs.
21. Write notes on oral contraceptives
22. Classify NSAIDS with examples.

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**FACULTY OF PHARMACY**  
**B. Pharmacy (PCI) V - Semester (Main & Backlog) Examination, March 2025**  
**Subject: Industrial Pharmacy-I**

**Time: 3 Hours**

**Max. Marks: 75**

**PART – A**

**Note: Answer all the questions.**

**(10 x 2 = 20 Marks)**

1. Define Preformulation.
2. What is BCS classification of drugs?
3. Differentiate D tooling and BB tooling.
4. Describe identifying tests for type of emulsion.
5. Write a note on Bloom Strength.
6. Write the differences between type A and type B gelatin.
7. Differentiate small volume parenterals and large volume parenterals.
8. What is Aseptic area?
9. Describe types of Glass used for packaging of pharmaceutical products.
10. Define and classify cosmetics.

**PART – B**

**Note: Answer any two questions.**

**(2 x 10 = 20 Marks)**

11. Describe production of hard gelatin capsule shell and filling of hard gelatin capsules.
12. Explain formulation and production of parenterals.
13. Describe Quality control tests for Tablets.

**PART – C**

**Note: Answer any seven questions.**

**(7 x 5 = 35 Marks)**

14. Describe methods to study solid forms.
15. Write a note on determination of partition coefficient and its significance.
16. Describe different types of coating of tablets.
17. Explain formulation considerations of liquid dosage forms.
18. Write in detail about extrusion-spheroniation technique.
19. Write a note on propellants in Aerosols.
20. Explain the process of Freeze drying.
21. Describe the formulation and preparation of Shampoos.
22. Describe factors influencing choice of containers for pharmaceutical products packaging.

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Code No: G- 13098/PCI

**FACULTY OF PHARMACY**

**B. Pharmacy (PCI) V - Semester (Main & Backlog) Examination, March 2025**  
**Subject: Pharmacognosy & Phytochemistry – II**

**Time: 3 Hours**

**Max.Marks:75**

**PART - A**

**Note: Answer all the questions.**

**(10 x 2 = 20 Marks)**

1. Write the applications of tracer technique.
2. Write about autoradiography.
3. Give the source and chemical structure of artemisin.
4. Describe the source and chemical test for Aloes.
5. Write the importance of spectroscopy.
6. Define chromatography.
7. Define alkaloids and steroids.
8. Write the biological source of Digitalis and Liquorice.
9. Describe the gold beaters skin test and murexide test.
10. Give the source and mechanism of action of taxol.

**PART - B**

**Note: Answer any two questions.**

**(2 x 10 = 20 Marks)**

11. Define and write the principles of extraction. List the extraction techniques and describe any three methods with merits and demerits.
12. Write the source, isolation and estimation of Quinine and caffeine.
13. What are volatile oils and classify. Discuss the methods of volatile oil extraction.

**PART - C**

**Note: Answer any seven questions.**

**(7 x 5 = 35 Marks)**

14. Write the source, chemistry and therapeutic uses of Opium.
15. What are resins? Give the source and uses of Asafoetida colophony.
16. Describe the source, chemical structure, uses and isolation of forskolin.
17. Discuss the principle and applications of HPLC and HPTLC.
18. Give an informative note on electrophoresis.
19. Describe the specific chemical test for steroids, flavonoids and alkaloids.
20. Write the estimation of artemisin and digoxin.
21. Write the applications of IR and UV spectroscopy.
22. Write the source and chemical structure of diosgenin, podophyllotoxin and Reserpine.

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Code No: G-13095/PCI

**FACULTY OF PHARMACY**

**B. Pharmacy (PCI) V - Semester (Main & Backlog) Examination, March 2025**

**Subject: Medicinal Chemistry-II**

**Time: 3 Hours**

**Max. Marks: 75**

**PART – A**

**Note: Answer all the questions.**

**(10 x 2 = 20 Marks)**

1. Write the uses and mechanism of action of acetazolamide.
2. Explain anti-hyperlipidemic agents with examples.
3. Write the structure and uses of diethylstilbestrol.
4. Write the synthesis of warfarin.
5. Write the uses and mechanism of action of digitoxin.
6. Write the structure of betamethasone and dexamethasone.
7. Write the mechanism of action of bleomycin.
8. Write the uses and MOA of sildenafil.
9. Write the structure of testosterone and progesterone.
10. Explain loop diuretics.

**PART – B**

**Note: Answer any two questions.**

**(2 x 10 = 20 Marks)**

11. Write the chemical classification (with structures) and SAR of H<sub>1</sub>-antihistaminic agent.
12. Define antineoplastic agents. Write its classification (with structures) and detailed mechanism of action of each class.
13. Classify Local anesthetics. Explain the mechanising action & SAR.

**PART – C**

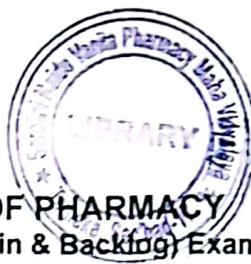
**Note: Answer any seven questions.**

**(7 x 5 = 35 Marks)**

14. Discuss in detail about proton pump inhibitors along with mechanism of action.
15. Explain the stereo chemistry of steroids.
16. What is diabetes? Classify antidiabetics with examples and give their mechanism of action.
17. Write the short note on anti-arrhythmic agents.
18. Explain in detail about coagulants and anticoagulants.
19. Write the synthesis of nitroglycerin and methyl dopa.
20. Write short notes on oral contraceptives.
21. Write the structure and uses of L-thyroxine, L-thyronine, propylthiouracil, methimazole.
22. Define and classify diuretic agents. Write the mechanism of action of thiazide diuretics.

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Code No: G-13099/PC

**FACULTY OF PHARMACY**  
**B. Pharmacy (PCI) V - Semester (Main & Backing) Examination, March 2025**  
**Subject: Pharmaceutical Jurisprudence**

**Time: 3 Hours**

**Max. Marks: 75**

**PART - A**

**Note: Answer all the questions.**

**(10 x 2 = 20 Marks)**

1. Define Loan license and repacking license.
2. What are the labelling instructions for Schedule X drugs.
3. Write the role of Drug Inspector.
4. Define Narcotic drugs and psychotropic substances.
5. Write the objectives of DPCO (Drug Price Control Order).
6. Write the constitution of Institutional Animal Ethics Committee.
7. Write the functions of the government Analyst.
8. Define patent.
9. Define medicinal hemp and poppy straw.
10. What is schedule N and its requirements?

**PART - B**

**Note: Answer any two questions.**

**(2 x 10 = 20 Marks)**

11. Explain the legal procedure for cultivation, production, manufacturing and sale of opium.
12. Describe the salient features, prohibited advertisements, exempted advertisements of drugs as per magic remedies act.
13. Explain the objectives and write about the constitution and functions of Pharmacy council of India (PCI) under Pharmacy Act-1948.

**PART - C**

**Note: Answer any seven questions.**

**(7 x 5 = 35 Marks)**

14. Write a note on Central drugs laboratory.
15. Discuss the layout and construction of Bonded laboratory.
16. Write a short note on Drug Enquiry Committee.
17. Define Narcotic drugs and psychotropic substances as per Act. Explain the offence and Penalties as per act.
18. Define the term Advertisement and Magic remedies. Explain prohibited advertisement as per act.
19. Write a note on CPCSEA guidelines for experiments on animals.
20. Write the procedure for obtaining a manufacturing license for schedule C, C1 drugs.
21. Write a note on National list of Essential Medicines (NLEM).
22. Write a note on Drug Price Control Order.

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