

FACULTY OF PHARMACY

**B. Pharmacy V Semester (PCI) (MAIN & BACKLOG) Examination, February /
March 2022**

Subject: Pharmaceutical Jurisprudence

Time: 3 Hours

Max. Marks: 75

PART - A

Note: Answer all questions.

(10 x 2 = 20 Marks)

- 1 Define misbranded and spurious drugs according to drugs and cosmetics act 1940.
- 2 What do you understand by loan license and repacking license?
- 3 What is Schedule H?
- 4 What is the role of drug inspectors?
- 5 Write the constitution of state pharmacy council.
- 6 Define narcotic drugs and psychotropic substances.
- 7 What are the objectives of drug price control order?
- 8 List the classes of exempted advertisements.
- 9 Define Patents.
- 10 What for schedule M, N, X and Y?

PART - B

Note: Answer any two questions.

(2 x 10 = 20 Marks)

- 11 Describe schedule M with regard to requirements for manufacturing of a drug.
- 12 Describe the salient features, prohibited advertisements, exempted advertisements of drugs as per magic remedies act.
- 13 Explain in detail about pharmaceutical ethics.

PART - C

Note: Answer any seven questions.

(7 x 5 = 35 Marks)

- 14 What are the requirements for manufacture of schedule X drugs?
- 15 Describe the classes of drugs and cosmetic prohibited from import according to D & C Act.
- 16 Describe wholesale, retail and restricted licenses for sale of drugs.
- 17 Write the constitution and responsibility of drug technical advisory board.
- 18 What are the objectives and functions of Pharmacy Act 1948?
- 19 Describe the procedure for manufacture and export of alcoholic preparations.
- 20 How do you calculate retail and ceiling price of scheduled formulations?
- 21 Explain CPCSEA guidelines for animal experiments.
- 22 Write a note on right to information act.

FACULTY OF PHARMACY
B. Pharmacy V Semester (PCI) (MAIN & BACKLOG) Examination,
February / March 2022

Subject: Pharmacognosy & Phytochemistry - II

Time: 3 Hours

Max. Marks: 75

PART - A

Note: Answer all questions.

(10 x 2 = 20 Marks)

- 1 What do you mean by radioisotope? Give some examples of radioisotopes used in tracer techniques.
- 2 Define primary and secondary metabolites and give examples.
- 3 What is cardiac glycoside?
- 4 Define alkaloids and give its classification with examples.
- 5 Give structure and uses of Caffeine.
- 6 How will you isolate curcumin from turmeric?
- 7 Write about important applications of Sennoside.
- 8 Give the structure and uses of Artemisinin.
- 9 Give the biological source and uses ginger.
- 10 Give chemical tests for identification of tannins.

PART - B

Note: Answer any two questions.

(2 x 10 = 20 Marks)

- 11 Explain in detail the biosynthesis of any one secondary metabolite through Shikimic acid pathway.
- 12 Explain in detail method of isolation, identification and analysis of Glycyrrhizic acid.
- 13 Write a descriptive note on various techniques used for extraction of phytoconstituents.

PART - C

Note: Answer any seven questions.

(7 x 5 = 35 Marks)

- 14 Write a note on tracer techniques.
- 15 Write about biological source, chemical constituents and uses of opium and aloe.
- 16 Write a note on method of isolation and identification of quinine.
- 17 Give the method of estimation for vincristine and vinblastine.
- 18 Write about biological source, chemical constituents and uses of coriander and benzoin.
- 19 Write a note on method of isolation and identification of podophylotoxin.
- 20 Explain the Isolation, identification and analysis of citral.
- 21 What do you mean by volatile oil? Give its classification and method of isolation.
- 22 Write a brief note on Electrophoresis.

FACULTY OF PHARMACY
B. Pharmacy V Semester (PCI) (MAIN & BACKLOG) Examination, February
2022

Subject: Pharmacology - II

Time: 3 Hours

Max. Marks: 75

PART - A

Note: Answer all questions.

(10 x 2 = 20 Marks)

- 1 What is hyperlipidemia? Mention two drugs used in hyperlipidemia.
- 2 Elucidate the mechanism of antianginal effect of Glyceryl trinitrate.
- 3 What are antiplatelet drugs and write their therapeutic uses?
- 4 What are the applications of plasma volume expanders?
- 5 Describe the triple response of histamine.
- 6 What is gout? Mention the drugs used in gout.
- 7 What are the therapeutic uses of T₃ and T₄?
- 8 Enlist the actions of insulin.
- 9 Define bioassay. List out the types of bioassays.
- 10 Mention the uses of tocolytics.

PART - B

Note: Answer any two questions.

(2 x 10 = 20 Marks)

- 11 (a) Classify Diuretic agents.
(b) Explain the pharmacology of Loop diuretics.
- 12 Define antihypertensives. Classify with examples. Write the mechanism of action, adverse drug reactions and therapeutic uses of ACE inhibitors.
- 13 (a) Define and classify Oral Hypoglycemic agents.
(b) Write the pharmacology of Biguanides.

PART - C

Note: Answer any seven questions.

(7 x 5 = 35 Marks)

- 14 Explain about oxytocics.
- 15 What are the methods of bioassay of d-tubocurarine? Discuss any one method in detail.
- 16 Write short notes on oral contraceptives.
- 17 Discuss the pharmacology of corticosteroids.
- 18 Classify NSAIDs with examples. Explain the mechanism of action of aspirin.
- 19 Write the pharmacological actions and uses of prostaglandins.
- 20 Write short notes on oral anticoagulants.
- 21 Discuss briefly about anti-platelet drugs.
- 22 What is arrhythmia? Classify antiarrhythmic drugs.

FACULTY OF PHARMACY
B. Pharmacy V Semester (PCI) (Main & Backlog) Examination,
February 2022

Subject: Industrial Pharmacy - I

Time: 3 Hours

Max. Marks: 75

PART - A

Note: Answer all questions.

(10 x 2 = 20 Marks)

- 1 What is the need of preformulation studies in pharmaceutical product development?
- 2 Write the differences between crystalline and amorphous forms of solid.
- 3 Explain the importance of enteric coating of tablet.
- 4 Describe the granulation methods for tablet manufacturing.
- 5 Outline the steps of manufacturing of hard gelatin capsule SHELL.
- 6 Enlist the pelletization techniques.
- 7 What is tonicity? Explain its importance for parenteral products.
- 8 Write the principle involved in LAL test for injectables.
- 9 Illustrate the components of aerosol system with the help of neat diagram.
- 10 How sunscreen products help to protect skin against UV radiation?

PART - B

Note: Answer any two questions.

(2 x 10 = 20 Marks)

- 11 (a) Describe the compression cycle for tablet manufacturing.
(b) Explain in process quality control tests for tablet compression.
- 12 (a) Describe sterility test procedures as per official books.
(b) Discuss formulation considerations for ophthalmic products.
- 13 (a) Elucidate the manufacturing of lipstick.
(b) What are the possible interactions between content and packaging material?

PART - C

Note: Answer any seven questions.

(7 x 5 = 35 Marks)

- 14 What is BCS classification? Discuss its importance.
- 15 Discuss the tablet additives with examples of each class.
- 16 Describe the importance of fine particle characterization in preformulation Studies.
- 17 Discuss the method for preparation of emulsion.
- 18 Describe the manufacturing defects of hard gelatine capsules.
- 19 Explain powder and liquid layering methods for pelletization, with a note on Equipment used for the same.
- 20 Discuss quality control of parenteral products.
- 21 Describe ingredients for toothpaste manufacturing.
- 22 Explain the criteria for selection of packaging material.

FACULTY OF PHARMACY
B. Pharmacy V Semester (PCI) (MAIN & BACKLOG) Examination,
February / March 2022

Subject: Medicinal Chemistry - II

Time: 3 Hours

Max. Marks: 75

PART - A

Note: Answer all questions.

(10 x 2 = 20 Marks)

- 1 Write about histamine receptors and their distribution in the body.
- 2 Outline the synthesis of mercaptopurine.
- 3 Classify antianginals with examples.
- 4 Outline the synthesis of chlorthiazide.
- 5 What are coagulants? Give examples.
- 6 Describe HMGCoA reductase inhibitors.
- 7 Write the structures of oestrone and oestrous.
- 8 What are thyroid drugs? Give examples.
- 9 Discuss the mechanism of action of biguanides with examples.
- 10 Write the structures of procaine and benzocaine.

PART - B

Note: Answer any two questions.

(2 x 10 = 20 Marks)

- 11 (a) Classify H₁-antagonists with two structures from each class.
(b) Classify alkylating agents. Explain the mechanism of action and synthesis of meclorothamine.
- 12 Discuss in detail about the mechanism of action of the following classes of diuretics:
(a) Carbonic anhydrase inhibitors.
(b) Potassium sparing diuretics
(c) Loop diuretics.
- 13 (a) Classify local anesthetics with structures.
(b) Write the mechanism of action and synthesis of disopyramide phosphate.

PART - C

Note: Answer any seven questions.

(7 x 5 = 35 Marks)

14 Discuss the mechanism of action of proton pump inhibitors.

15 Write the mechanism of action of vasodilators and outline the synthesis of nitroglycerin.

16 Classify anti-hyperlipidemic agents with one structure from each class.

17 Give an account on anticoagulants. Give the synthesis of warfarin.

18 Write a note on drugs used in congestive heart failure.

19 Classify sex hormones with examples.

20 Explain in detail about corticosteroids.

21 Write a note on insulin preparations.

22 Discuss SAR of local anesthetics.

FACULTY OF PHARMACY

B. Pharmacy V-Semester (PCI) (Backlog) Examination, September 2021

Subject: Medicinal Chemistry – II

Time: 2 Hours

Max. Marks: 75

Note: Answer any seven questions Part – A, any one question from Part – B and any five questions from Part – C.

PART – A (7 x 3 = 21 Marks)

- 1 Write about histamine receptors and their distribution in the body.
- 2 Outline the synthesis of mechlorethamine.
- 3 Classify vasodilators with examples.
- 4 Outline the synthesis of furosemide.
- 5 What are coagulants? Give examples.
- 6 Discuss the mechanism of action of HMGCoA reductase inhibitors.
- 7 Write the structures of oestrone and diethylstilbestrol.
- 8 What are anti-thyroid drugs? Give examples.
- 9 Discuss the mechanism of action of glucosidase inhibitors with examples.
- 10 Write the structures of lidocaine and dibucaine.

PART – B (1 x 14 = 14 Marks)

- 11 (a) Classify H₁-antagonists with two structures from each class.
(b) Classify antimetabolites. Explain the mechanism of action and synthesis of methotrexate.
- 12 Discuss in detail about the mechanism of action of the following classes of diuretics:
(a) Carbonic anhydrase inhibitors
(b) Thiazides
(c) Loop diuretics
- 13 (a) Classify anti-arrhythmic drugs with structures.
(b) Write the mechanism of action and synthesis of tolbutamide.

PART – C (5 x 8 = 40 Marks)

- 14 Discuss the mechanism of action of omeprazole.
- 15 Write the mechanism of action of vasodilators and outline the synthesis of Isosorbide dinitrate.
- 16 Classify anti-hypertensive agents with one structure from each class.
- 17 Give an account on anticoagulants. Give the synthesis of warfarin.
- 18 Write in detail about stereochemistry of steroids.
- 19 Explain oral contraceptives with structures of drugs.
- 20 Write a note on insulin preparations.
- 21 Discuss SAR of local anesthetics.
- 22 Outline the synthesis of benzocaine and procaine.

FACULTY OF PHARMACY

B. Pharmacy V-Semester (PCI) (Backlog) Examination, September 2021

Subject: Industrial Pharmacy – I

Time: 2 Hours

Max. Marks: 75

Note: Answer any seven questions Part – A, any one question from Part – B and any five questions from Part – C.

PART – A (7 x 3 = 21 Marks)

- 1 Define Polymorphism.
- 2 Classify tablets and give ideal characteristics of tablets.
- 3 Give formulation of suspension.
- 4 Write a note on sizes of hard gelatin capsules.
- 5 What are pellets? Give advantages of pellets.
- 6 Mention different evaluation tests for parenterals.
- 7 What are Tonicity modifiers?
- 8 What is the use of Abrasives in the formulation of tooth pastes?
- 9 What is Orange peel effect in tablet coating?
- 10 What are the unofficial tests for evaluation of tablets?

PART – B (1 x 14 = 14 Marks)

- 11 Explain the study of physical characteristics during preformulation.
- 12 (a) Explain perforated coating pans.
(b) Write a brief note on filing of capsules.
- 13 (a) Explain pyrogen test for parenterals.
(b) Discuss about the formulation of pharmaceutical aerosols.

PART – C (5 x 8 = 40 Marks)

- 14 How flow properties of powders are measured?
- 15 Explain about hardness and friability testing of tablets.
- 16 Write a brief note on manufacturing defects in tablet coating.
- 17 Explain formulation considerations of liquid dosage forms.
- 18 Explain weight variation test and content uniformity test for capsules.
- 19 Enlist techniques of pelletization. Explain advantages of pellets over conventional dosage forms.
- 20 Write a brief note on sterile powders.
- 21 Explain Draize eye test for ophthalmics.
- 22 Explain the factors affecting selection of pharmaceutical packaging materials.

FACULTY OF PHARMACY

B.Pharmacy V Semester (PCI) (Backlog) Examination, September 2021

Subject: Pharmacognosy and Phytochemistry - II

Time: 2 Hours

Max. Marks: 75

PART - A

Note: Answer any seven questions.

(7 x 3 = 21 Marks)

- 1 Write the biological sources, chemical constituent names of senna.
- 2 What is the difference between TLC and PC?
- 3 Write the biological source and uses of sennosides and Atropine.
- 4 Write one chemical test for detection of flavonoids and alkaloids.
- 5 Write applications of UV spectroscopy in analysis of crude drugs.
- 6 Write the source, active constituents and uses of Liquorice.
- 7 Explain concept of microwave assisted extraction.
- 8 What are resins? Give five examples.
- 9 Give structure and uses of Digoxin.
- 10 Write the active constituents in clove and cinnamon.

PART - B

Note: Answer any one question.

(1 x 14 = 14 Marks)

- 11 Write a detailed note on super critical fluid extraction.
- 12 Write a procedure for isolative and estimation cur cumin.
- 13 Write about precursor-product and sequential analysis methods in tracer technique.

PART - C

Note: Answer any five questions.

(5 x 8 = 40 Marks)

- 14 Write the biological source and therapeutic uses of
(a) Liquorice (b) Ginger (c) Artemesia.
- 15 Write a note on electrophoresis.
- 16 Draw structure and write procedures for isolation of menthol.
- 17 Discuss chemistry and identification tests for Opium alkaloids.
- 18 Write commercial applications of eugenol, gentian and vinca alkaloids.
- 19 Write source, active constituents and uses of guggul and digitalis.
- 20 Write procedures for industrial production of sennosides.
- 21 Enlist modern extraction techniques. Write in detail about any one technique.
- 22 Write biological sources, chemistry and uses of lignans.

FACULTY OF PHARMACY

B. Pharmacy V-Semester (PCI) (Backlog) Examination, September 2021

Subject: Pharmacology – II

Time: 2 Hours

Max. Marks: 75

Note: Answer any seven questions Part – A, any one question from Part – B and any five questions from Part – C.

PART – A (7 x 3 = 21 Marks)

- 1 Define and classify Autocoids.
- 2 Write the differences between COX-I and COX-II.
- 3 Write the mechanism of action of Streptokinase.
- 4 What are the adverse effects of Corticosteroids?
- 5 Define Bioassay. Write the applications of Bioassay.
- 6 What are different waves and segments of ECG? Write their significance.
- 7 Classify antidiuretics?
- 8 Explain the mechanism of action of Quinidine.
- 9 Mention various Anterior Pituitary Hormones.
- 10 Write the functions of Insulin and Glucagon.

PART – B (1 x 14 = 14 Marks)

- 11 (a) Define and classify diuretics.
(b) Write in detail about Loop Diuretics.
- 12 (a) Classify Anticoagulants.
(b) Explain the pharmacology of Heparin and Warfarin.
- 13 Write the Pharmacology and uses of Eicosanoids

PART – C (5 x 8 = 40 Marks)

- 14 Explain about oxytocic agents.
- 15 Write the bioassays of Insulin.
- 16 Write the pharmacology of ACE Inhibitors.
- 17 Explain the pharmacological actions of histamine and mention H₂ antagonists and their uses.
- 18 Write a note on HMG-CoA reductase inhibitors.
- 19 Explain the pharmacology of Sodium nitroprusside.
- 20 Write a note on biguanides.
- 21 Classify antithyroid agents. Write about thyroid hormone inhibitors.
- 22 Explain the mechanism of action and adverse effects of Digoxin.

FACULTY OF PHARMACY

B. Pharmacy V-Semester (PCI) (Backlog) Examination, September 2021

Subject: Pharmaceutical Jurisprudence

Time: 2 Hours

Max. Marks: 75

Note: Answer any seven questions Part – A, any one question from Part – B and any five questions from Part – C.

PART – A (7 x 3 = 21 Marks)

- 1 Define registered pharmacist under pharmacy act 1948.
- 2 Define drugs and cosmetics as per D and C act.
- 3 Define opium and coca leaves.
- 4 Write the difference between adulterated and spurious drug.
- 5 Write the formula to calculate retail price of formulation.
- 6 Write the objectives of the medical termination of pregnancy.
- 7 What are schedule X and H drugs?
- 8 Differentiate between laws and ethics.
- 9 What is loan license?
- 10 Write the functions of the government analyst.

PART – B (1 x 14 = 14 Marks)

- 11 What is “manufacture of drugs”? Explain in detail about procedure to obtain license for manufacture of drugs belonging to schedule C, C₁ and X.
- 12 What do you mean by patent? Discuss the various intellectual property rights.
- 13 Differentiate between bonded and non-bonded manufactory. Write the objectives of Medicinal and Toilet preparation Act 1955. Explain in detail about construction of bonded laboratory.

PART – C (5 x 8 = 40 Marks)

- 14 Define the term advertisement and magic remedies. Explain prohibited advertisement as per act.
- 15 Write the objectives of pharmacy act. Explain the constitution of PCI.
- 16 How is DTAB constituted? Write its functions.
- 17 Explain the general labelling requirement for drug and cosmetics. Write the labelling requirements for an ophthalmic preparation.
- 18 Write the qualification, duties and power of drug inspector.
- 19 Explain CPCSEA guidelines for breeding and stocking of animals.
- 20 Explain in detail about the code of pharmaceutical ethics of pharmacist in relation to his job.
- 21 Define Narcotic drugs and psychotropic substances as per Act. Explain the offence and penalties as per act.
- 22 Discuss the various aspects of Indian Pharmaceutical Legislation.

FACULTY OF PHARMACY**B. Pharmacy V-Semester (PCI) (Main & Backlog) Examination, March 2021****Subject: Medicinal Chemistry – II****Time : 2 Hours****Max. Marks: 75**

Note: Answer any seven questions Part – A, any one question from Part – B and any five questions from Part – C.

PART – A (7x3=21 Marks)

- 1 Give the structures of omeprazole and lansoprazole.
- 2 Write the mechanism of action of anticancer plant products.
- 3 Outline the synthesis of nitroglycerin.
- 4 Discuss the mechanism of action of ACE inhibitors.
- 5 Outline the synthesis of warfarin.
- 6 Outline the synthesis of disopyramide phosphate.
- 7 What are oral contraceptives? Give examples.
- 8 Write the structures of testosterone and oestradiol.
- 9 Discuss the mechanism of action of biguanides.
- 10 Write about structure of insulin.

PART – B (1x14=14 Marks)

- 11 (a) What are H₂-antagonists? Outline the synthesis of cimetidine.
(b) Classify anti-neoplastic agents with two structures from each class.
- 12 (a) Explain the mechanism of action of anti-arrhythmic drugs with examples.
(b) Outline the synthesis of chlorothiazide and furosemide.
- 13 (a) Classify oral hypoglycemic drugs with one structure from each class.
(b) Discuss SAR of local anesthetics.

PART – C (5x8=40 Marks)

- 14 Outline the synthesis of triprolidine hydrochloride and promethazine hydrochloride.
- 15 Classify calcium channel blockers with one structure from each class.
- 16 Classify anti-hyperlipidemics with one structure from each class.
- 17 Give an account on agents used in treating congestive heart failures.
- 18 Write in detail about corticosteroids with structures.
- 19 Write a note on thyroid and anti-thyroid drugs.
- 20 Discuss mechanism of action of sulfonylureas and thiazolidinediones with examples.
- 21 Classify local anesthetics with structures.
- 22 Outline the synthesis to tolbutamide and procaine.

FACULTY OF PHARMACY

B. Pharmacy V-Semester (PCI) (Main & Backlog) Examination, March 2021

Subject : Pharmaceutical Jurisprudence

Time: 2 Hours

Max. Marks: 75

Note: Answer any seven questions Part – A, any one question from Part – B and any five questions from Part – C.

PART – A (7x3=21 Marks)

- 1 Write the functions of DTAB.
- 2 Define Narcotic drugs and Psychotropic substances as per Act.
- 3 Write the functions of government analyst.
- 4 Define registered pharmacist under pharmacy act 1948.
- 5 Explain Education regulation.
- 6 Define cosmetic as per D & C act.
- 7 What is the instruction to be followed for schedule X and G drugs?
- 8 Differentiate between laws and ethics.
- 9 What is restricted license?
- 10 Define drugs and cosmetics as per D & C act.

PART- B (1x14=14 Marks)

- 11 Explain the legal procedure for cultivation, production, manufacturing and sale of opium.
- 12 Write the objectives of pharmacy act. Explain the constitution and functions of pharmacy council.
- 13 How will you differentiate between bonded and non-bonded manufactory? Write the objectives of Medicinal and Toilet preparation Act, 1955. Explain in detail about construction of bonded laboratory.

PART- C (5x8=40 Marks)

- 14 Explain in detail the classes of drugs whose import is prohibited as per D & C Act.
- 15 Explain the terms trademarks, patent and copy right as per act.
- 16 Write a short note on Central drug Laboratory.
- 17 Define the terms Advertisement and Magic remedies. Explain prohibited advertisement as per act.
- 18 Write the conditions for termination of pregnancy and admission register.
- 19 Write the qualification, duties and power of drug inspector.
- 20 Explain CPCSEA guidelines for Laboratory animals.
- 21 Explain in detail about the code of pharmaceutical ethics of pharmacist in relation to his job.
- 22 Describe the method of calculating the retail price of formulation.

FACULTY OF PHARMACY**B. Pharmacy V-Semester (PCI) (Main & Backlog) Examination, March 2021****Subject: Pharmacognosy & Phytochemistry – II****Time: 2 Hours****Max. Marks: 75****Note: Answer any seven questions Part – A, any one questions from Part – B and any five question from Part – C.****PART – A (7x3=21 Marks)**

- 1 Define radioactive isotopes and give its applications.
- 2 Write the difference between Primary and Secondary metabolites.
- 3 Write the Biological source, Chemical constituents and uses of Cinnamon.
- 4 Write about Borntragers and modified Borntragers test.
- 5 Define Glycosides and write about cardenolides.
- 6 Write the Biological source, chemical constituents and uses of
a) Opium b) Pterocarpus
- 7 Write any two identification test for alkaloids.
- 8 Explain Keller – kilani test.
- 9 Write the Chemical constituents and the therapeutic uses of
a) Tea b) Asafoetida.
- 10 Give the Biological source and use of Artemisia and Rauwolfia.

PART – B (1x14=14 Marks)

- 11 Explain the biosynthesis of secondary metabolite through Shikimic acid pathway.
- 12 Describe the applications of chromatographic techniques with special emphasis on isolation and purification of Phytoconstituents in crude drugs.
- 13 Describe in detail the Biological source, macroscopy, microscopy, chemical constituents, Chemical tests and therapeutic uses of
a) Fennel b) Coriander

PART – C (5x8=40 Marks)

- 14 Explain Autoradiography.
- 15 Write about Acetate malonate pathway.
- 16 Give the Biological source, chemical constituents, macroscopy, chemical test and therapeutic uses of Liquorice.
- 17 Explain the microscopy of Digitalis leaf with a neat labelled diagram.
- 18 Describe the isolation and analysis of menthol.
- 19 Write about the estimation and utilization of Diosgenin.
- 20 Explain the isolation, purification and identification of Phytoconstituents by Electrophoresis.
- 21 Explain the Biological source, Chemical Tests, Chemical constituents, microscopy and therapeutic uses of Benzoin.
- 22 Explain the Isolation, identification and analysis of Atropine.

FACULTY OF PHARMACY

B. Pharmacy V-Semester (PCI) (Main & Backlog) Examination, March 2021

Subject: Pharmacology – II

Time : 2 Hours

Max. Marks: 75

Note: Answer any seven questions Part – A, any one question from Part – B and any five questions from Part – C.

PART – A (7x3=21 Marks)

- 1 Define haematinics and give examples.
- 2 Explain the uses of antihistaminics and give examples
- 3 Write a note on Allopurinol.
- 4 What are the uses of Plasma volume expanders?
- 5 Write a note on Spironolactone.
- 6 What are different uses of 5-HT antagonists?
- 7 What are the adverse effects of Corticosteroids?
- 8 Explain the mechanism of action of Statins.
- 9 Write about the steps of thyroid hormone synthesis.
- 10 What are anabolic steroids? What are their uses?

PART- B (1x14=14 Marks)

- 11 (a) Define and classify Oral Hypoglycemic agents.
(b) Write in detail about Sulphonylureas.
- 12 (a) Classify Diuretic agents.
(b) Explain the pharmacology of Thiazide diuretics.
- 13 Explain various methods of bioassays of Insulin and Oxytocin.

PART-C (5x8=40 Marks)

- 14 Explain about tocolytic agents.
- 15 Define Bioassay. What are different types of Bioassays?
- 16 Write the pharmacology of COX-II Inhibitors.
- 17 Classify antiarrhythmics. Add a note on class II antiarrhythmics.
- 18 Write a note on hormonal contraceptives.
- 19 Write the pharmacological actions and uses of prostaglandins.
- 20 Explain the pharmacology of Oxytocin.
- 21 Define Coagulants. Add a note on fibrinolytics.
- 22 Write a note on Calcium regulation in body.

FACULTY OF PHARMACY

B. Pharmacy V-Semester (PCI) (Main & Backlog) Examination, March 2021

Subject: Industrial Pharmacy – I

Time: 2 Hours

Max. Marks: 75

Note: Answer any seven questions Part – A, any one question from Part – B and any five questions from Part – C.

PART – A (7x3=21 Marks)

- 1 Define pharmagel A and Pharmagel B.
- 2 What are the special instructions to be printed on the eye drop container according to drugs and cosmetics act?
- 3 Define enteric coating and give its advantages.
- 4 Mention different sealing methods for hard gelatin capsules.
- 5 Define preformulation studies.
- 6 Write the BCS classification of drugs.
- 7 Write the significance of isotonicity in parenterals.
- 8 Define Base adsorption.
- 9 What are the different materials used for packaging?
- 10 Define Propellant.

PART – B (1x14=14 Marks)

- 11 Write a note on production facilities required for parenteral preparations.
- 12 (a) Write in brief about the manufacture of Aerosols.
(b) Explain about the defects in capsules.
- 13 (a) Explain about disintegration and dissolution test for tablets.
(b) Write in detail about evaluation of containers.

PART – C (5x8=40 Marks)

- 14 Explain polymorphism.
- 15 Explain sugar coating of tablets.
- 16 Write a brief note on filling and packaging of oral liquids.
- 17 Explain method of preparation of hard gelatin capsule shell.
- 18 Write in detail about solution layering.
- 19 Explain the process of freeze drying.
- 20 Explain sterility test for ophthalmic products.
- 21 Define and classify cosmetics and give their uses.
- 22 Write a brief note on propellants in Aerosols.