

FACULTY OF PHARMACY

B. Pharmacy V-Semester (PCI) (Suppl.) Examination, December 2020

Subject: Medicinal Chemistry-II

Time: 2 Hours

Max. Marks: 75

PART – A

Note: Answer any Seven questions.

(7 x3=21 Marks)

1. Write the role of insulin hormone
2. What is the drug with Imidazole nucleus showing anti-hypertensive action and give its structure
3. Give the mechanism of action and uses of Mercaptopurine.
4. Write the mechanism of action of coagulation process
5. Give the structures of any two drugs used for treating angina pectoris.
6. What drugs are used as ACE inhibitors and give their mechanism?
7. Mention the problem associated with loop diuretics
8. Define anti-coagulants
9. What are carbonic anhydrase inhibitors? Give the examples with one structure.
10. Write the functions of thyroid hormones.

PART – B

Note: Answer One question.

(1 x14=14 Marks)

11. a) Classify H₁ anti-histaminics with examples.
b) Write a note on gastric proton pump inhibitors
12. a) Classify anti-hypertensive agents with examples. Write the mechanism of Renin- Angiotensin-Aldosterone system.
b) Write a note on anti-metabolites used in the treatment of neoplasm.
13. Give the synthesis, mechanism of action and uses of
 - a) Diphenhydramine HCl
 - b) Furosemide
 - c) Procaine

PART - C

Note: Answer any Five questions.

(5x8=40 Marks)

14. Write about the types of histamine receptors and their distribution in the human body.
15. What are alkylating agents? Classify them with examples
16. Discuss the SAR of thiazide diuretics
17. Explain how the anti-arrhythmic drugs are classified
18. Classify oral hypoglycemic agents with examples
19. Write about the drugs used in Congestive heart failure
20. Write a note on anti-thyroid drugs with examples
21. Give the synthesis and uses of
 - a) Chlorthiazide and
 - b) Tolbutamide
22. Classify local anaesthetics and write the mechanism of action.

FACULTY OF PHARMACY

B. Pharmacy V-Semester (PCI) (Suppl.) Examination, December 2020

Subject : Pharmacology - II

Time: 2 Hours

Max. Marks: 75

PART – A

Note: Answer any Seven questions.

(7 x3=21 Marks)

1. What is hyperlipidemia? Mention four drugs used as antihyperlipidemics
2. What is congestive heart failure? Mention two drugs used in congestive heart failure
3. What are the therapeutic uses of vasopressin analogs?
4. What is rheumatism? Mention the drugs used in rheumatism.
5. Describe the triple response of histamine
6. Classify autacoids with examples
7. What are Hematinics? Mention the names
8. Explain about hormonal regulation of plasma calcium level
9. What are anabolic steroids and write the therapeutic uses
10. Define bioassay. List out the types of bioassays

PART – B

Note: Answer One question.

(1 x14=14 Marks)

11. What is congestive heart failure? Classify the drugs for congestive heart failure
Write
the mechanism of action. Adverse drug reactions and therapeutic uses of digoxin.
12. Define and classify diuretics. Write the mechanism of action, adverse drug reactions
and therapeutic uses of loop diuretics.
13. Classify oral hypoglycemic drugs. Write the pharmacology of sulfonylureas.

PART - C

Note: Answer any Five questions.

(5x8=40 Marks)

14. Write the mechanism of action, adverse drug reactions and therapeutic uses of ACE inhibitors.
15. What is arrhythmia? Classify antiarrhythmic drugs.
16. Write short notes on pharmacology of vitamin B₁₂.
17. Write short notes on oral anticoagulants.
18. Explain about 5-HT receptors and drugs acting on them.
19. Write the pharmacological actions of aspirin.
20. Write the pharmacological actions and therapeutic uses of thyroxine.
21. What are the methods of bioassay of insulin? Discuss any one method in detail.
22. Write notes on oxytocics and tocolytics.

FACULTY OF PHARMACY

B. Pharmacy V-Semester (PCI) (Suppl.) Examination, December 2020

Subject : Industrial Pharmacy - I

Time: 2 Hours

Max. Marks: 75

PART – A

Note: Answer any Seven questions.

(7 x3=21 Marks)

1. What is preformulation study
2. Define bulk density and write its importance in Pharmacy
3. Define buccal and sublingual tablets
4. Enlist various types of coating materials of tablets
5. What is the difference between cold cream & Vanishing cream?
6. What is aseptic area?
7. List out various ingredients used in tooth paste
8. What are the vehicles used in the preparation of parenterals?
9. Classify parenteral with suitable examples.
10. What are pyrogens?

PART – B

Note: Answer One question.

(1 x14=14 Marks)

11. Enlist the excipients used in tablet manufacture with examples. Write their role and mechanism of action.
12. Give the layout for manufacture of parenteral formulations.
13. Explain the formulation and evaluation of aerosols.

PART - C

Note: Answer any Five questions.

(5x8=40 Marks)

14. Write a note on formulation & labelling of eye drops
15. Explain defects in tablet coating
16. Describe the manufacturing of soft gelatin capsules.
17. Write a note on injectable suspensions
18. What are propellants? Mention their advantages and disadvantages.
19. Write a note on factors influencing choice of containers
20. Write a note on formulation of lipsticks
21. Write a note on LAL test & sterility test.
22. Write a note on palletization process.

FACULTY OF PHARMACY

B. Pharmacy V-Semester (PCI) (Suppl.) Examination, December 2020

Subject : Pharmacognosy & Phytochemistry – II

Time: 2 Hours

Max. Marks: 75

PART – A

Note: Answer any Seven questions.

(7 x3=21 Marks)

- 1 Define Biosynthesis.
- 2 What are Secondary metabolites? Give examples.
- 3 Write the Biological source, chemical constituents and uses of Guggul.
- 4 Write about macroscopical characters of Vinca.
- 5 Define Alkaloids and give the classification of Alkaloids.
- 6 Write about the estimation of Digoxin.
- 7 Define Terpenoids and give their classification.
- 8 Explain Vitali-morin test.
- 9 Write the Biological source, chemical constituents and uses of Senna.
- 10 Give the therapeutic uses of
(a) Ruta (b) Mentha (c) Myrrh (d) Aloe

PART – B

Note: Answer One question.

(1 x14=14 Marks)

- 11 Write in detail about the Acetate malonate and Acetate mevalonate pathway.
- 12 Write the synonym, Biological source, macroscopy, microscopy, chemical constituents, chemical tests and uses of Digitalis leaf.
- 13 What are the different types of chromatographic methods? Give their applications in the evaluation of crude drug formulations.

PART - C

Note: Answer any Five questions.

(5x8=40 Marks)

- 14 Write about the role of radioactive isotopes in the investigation of biogenetic studies.
- 15 Write a detailed pharmacognostical study of Belladonna.
- 16 Write about the estimation and utilization of Atropine.
- 17 Write the Biological source, macroscopy and uses of
(a) Ginger (b) Dioscorea

- 18 Define Glycosides. Classify glycosides with specific examples.
- 19 Write about estimation and utilization of
(a) Sennoside (b) Caffeine
- 20 Write notes on the application of UV Spectroscopy in identification of phytoconstituents in crude drugs.
- 21 Explain the Biological source, macroscopy, chemical constituents, chemical tests and the therapeutic used Catechu.
- 22 Write in detail about the amino acid pathway.

FACULTY OF PHARMACY

B. Pharmacy V-Semester (PCI) (Main) Examination, December 2019

Subject: Industrial Pharmacy - I

Time: 3 Hours

Max. Marks: 75

Note: Answer all questions from Part-A, any two questions from Part-B and any seven questions from Part-C

PART- A (10 x 2 = 20 Marks)

- 1 Define Preformulation study.
- 2 Classify tablets.
- 3 Why coating tablets are required.
- 4 Define emulsion & suspension.
- 5 List out various ingredients used in tooth paste.
- 6 What is aseptic area?
- 7 What are the vehicles used in the preparation of parenterals.
- 8 What are pyrogens?
- 9 What are different types of aerosols?
- 10 Classify parenteral with suitable examples.

PART – B (2 x 10 = 20 Marks)

- 11 Explain quality control tests of tablets.
- 12 Explain formulation and the production of parenterals.
- 13 Explain the formulation and quantity control tests for hard gelatin or soft gelatin capsules?

PART – C (7 x 5= 35 Marks)

- 14 Write a note on polymorphism and its applications.
- 15 Differentiate between flocculated and deflocculated suspension.
- 16 Write the formulation of cold cream.
- 17 Explain quality control tests of eye ointment.
- 18 Write a note on factors influencing choice of containers.
- 19 What are propellants? Mention their advantages and disadvantages?
- 20 Write a note on formulation of hair dyes.
- 21 Write a note on LAL test & sterility test.
- 22 Write a note on palletization process.

FACULTY OF PHARMACY**B. Pharmacy V-Semester (PCI) (Main) Examination, December 2019****Subject: Medicinal Chemistry-II****Time: 3 Hours****Max. Marks: 75****Note: Answer all questions from Part-A, any two questions from Part-B and any seven questions from Part-C****PART- A (10 × 2 = 20 Marks)**

- 1 What are the uses of cortico steroids. Give two examples of drugs.
- 2 What are proton pump inhibitors? Give four examples
- 3 Give the mechanism of action and uses of Amlodipine.
- 4 Write the mechanism of action of Local anaesthetics.
- 5 Give the structures of any two drugs used as H₂ antagonists.
- 6 What are the drugs used as folate antagonists and give examples?
- 7 Write the mechanism of oral contraceptives along with examples.
- 8 List out the clotting factors of coagulation process.
- 9 What are diuretics? Give the mechanism of loop diuretics with uses.
- 10 What are the drugs used for congestive heart failure.

PART – B (2 × 10 = 20 Marks)

- 11 Classify anti-neoplastic agents with examples and one structure for each class. Write the mechanism of alkylating agents. (6+4)
- 12 a) Classify diuretics with examples and write the SAR of thiazide diuretics. (6)
b) Explain how the potassium sparing diuretics shows the diuretic action. (4)
- 13 Give the synthesis, mechanism of action and uses of
 - a) Cimetidine
 - b) Tolbutamide
 - c) Benzocaine(4+3+3)

PART – C (7 × 5 = 35 Marks)

- 14 Write a note on H₂-Antagonists.
- 15 Discuss the SAR of Local anaesthetics.
- 16 Classify anti-diabetic drugs with examples.
- 17 What are anti-arrhythmic drugs? Classify them with examples.
- 18 Write the SAR of H₁- anti-histaminics.
- 19 Classify anti-hyperlipidemic agents with examples and one structure for each class.
- 20 Write a note on thyroid and anti-thyroid drugs.
- 21 Write the classifications mechanism of antihypertensive drugs.
- 22 Write a note on sex hormones.

Code No: 6138/PCI

FACULTY OF PHARMACY

B. Pharmacy V-Semester (PCI) (Main) Examination, January 2020

Subject: Pharmaceutical Jurisprudence (BP505T)

Time: 3 Hours

Max. Marks: 75

Note: Answer all Questions from Part – A, and Two questions from Part – B, and any Seven questions from Part – C.

PART – A (10 X 2 = 20)

- 1 What are the objectives of pharmacy act?
- 2 Write about loan license.
- 3 Define medicinal hemp and poppy straw.
- 4 What are the following schedules under Drugs and Cosmetics Act stand for
a) Schedule N b) Schedule J c) Schedule H d) Schedule R
- 5 Write about the role of pharmacist in relation to his job?
- 6 Give various labeling requirements for Ophthalmic preparations.
- 7 Define Drug as per Drugs and Cosmetics Act.
- 8 Differentiate between Manufacture in bond and Manufacture outside bond.
- 9 What is a patent?
- 10 Define spurious drug and misbranded drug.

PART – B (2 x 10 = 20)

11. Enlist the Narcotic drugs as per the Narcotic drugs and psychotropic substances act 1985. Write about the official procedures for cultivation, production of opium, sale and distribution of opium products.
12. Write the constitution and functions of Pharmacy Council of India.
13. a) Explain the classes of advertisements prohibited according to Drugs and Magic Remedies Act 1954.
b) Write a note on intellectual property rights.

PART- C (7 x 5 = 35 Marks)

14. Explain about the constitution and functions of DTAB.
15. Explain in detail Schedule M
16. Write a note on CPCSEA guidelines for experiment on animals.
17. What are the qualifications, duties and functions of drug inspector?
18. Explain the salient features of medical termination of pregnancy act.
19. Explain RTI act.
20. Write the procedure for obtaining a manufacturing license for schedule C, C (1) drugs.
21. Write about various pharmaceutical legislations.
22. Write about the Drug price control order.

FACULTY OF PHARMACY**B. Pharmacy V Semester (PCI) (Main) Examination, January 2020****Subject: Pharmacognosy and Phytochemistry-II****Time: 3 hours****Max. Marks: 75****Note: Answer all questions from part-A. Any two questions from part-B and any seven questions from part-C****PART – A (10 x 2 = 20 Marks)**

1. Draw structure and write uses of
a) Quinine (b) Alion.
2. Write one chemical test each for detection of anthraquinone and cardiac glycosides.
3. Write applications of gas chromatography.
4. Write biological source, active constituents and uses of colophony.
5. Write commercial applications of Podophyllotoxin and artemisinin.
6. Write the applications of electrophoresis.
7. Write the applications of TLC.
8. What are the uses of artemisin or digoxin?
9. Mention any four crude drugs containing glycosides.
10. What are the active constituents in (i) Clove (ii) Cinnamon and their uses?

PART – B (2 x 10 = 20 Marks)

11. a) Write a note on chemistry of sennosides. 4
b) Write procedures for isolation and estimation of caffeine. 6
12. Discuss about shikimic acid pathway. 10
13. Write procedures for industrial production of any one natural product drug. 10

PART – C (7 X 5 = 35 Marks)

14. Write source and uses of benzoin, cinnamon and asafetida.
15. Write a note on Supercritical fluid extraction.
16. Discuss chemistry of digitalis glycosides.
17. Write about the principle and procedure and applications of TLC.
18. Draw structure and write procedure for isolation of curcumin.
19. Write about chemistry and uses of opium alkaloids.
20. Write the sources and procedures for the isolation of Atropine.
21. Mention two alkaloids containing crude drugs, write their active constituents and uses.
22. Write source, chemical constituents and uses of a) liquorice b) Catechew.

FACULTY OF PHARMACY
B. Pharmacy V-Semester (PCI) (Main) Examination, January 2020

Subject: Pharmacology - II

Time: 3 Hours

Max. Marks: 75

Note: Answer all Questions from Part – A, and Two questions from Part – B, and any Seven questions from Part – C.

PART – A (10 X 2 = 20)

1. Write the mechanism of action of digoxin.
2. What is hyperlipidemia? Mention the drugs.
3. What are antiplatelet drugs and write their therapeutic uses?
4. What is congestive heart failure? Mention the drugs used.
5. Write the mechanism of action and therapeutic uses of 5-HT₃ antagonists.
6. What are the therapeutic uses of prostaglandin analogs?
7. Write the mechanism of action of glucocorticoids.
8. What are the therapeutic uses of T₃ & T₄?
9. What are autocoids? Mention the classes.
10. Define bioassay. List out the types of bioassays.

PART – B (2 x 10 = 20)

11. Define antihypertensives. Classify with examples. Write the mechanism of action, adverse drug reactions and therapeutic uses of ACE inhibitors.
(Approved by AICTE, PCI and Affiliated to Osmania University)
12. Write the pharmacological actions, adverse effects and therapeutic uses of antihistamines.
13. Discuss about bioassay of insulin.

PART - C (7 x 5 = 35)

14. What is angina pectoris? Classify antianginal drugs.
15. Write short notes on pharmacology of vitamin B₁₂.
16. Write the mechanism of action, adverse drug reactions and therapeutic uses of loop Diuretics.
17. Classify anticoagulants. Write the therapeutic uses of oral anticoagulants.
18. Write the pharmacology of 5-HT.
19. Classify NSAIDs with examples.
20. Define bioassay. Write brief notes on types of bioassays.
21. Discuss about insulin preparations and mechanism of action of insulin.
22. Write short notes on oral contraceptives.