



Code No: 12285/PCI

FACULTY OF PHARMACY

B. Pharmacy VI-Semester (PCI) (Main & Backlog) Examination, September 2021

Subject: Medicinal Chemistry-III

Time: 2 Hours

Max. Marks: 75

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

PART – A (7X3 = 21 Marks)

1. Define & classify β - lactam antibiotics?
2. Write the structure of Benzly pencillin & Chlortetracycline?
3. Write the structure and uses of Strptomycin?
4. Write the structure of Isoniazid & Para amino salicylic acid?
5. Write the structure and uses of Dapsone?
6. Define Partition coefficient, Hammett's electronic parameter?
7. Write the mechanism of action of Tetracycline?
8. Write the mechanism of action of Macrolides?
9. Define prodrugs?
10. Write the β - Lactamase inhibitors?

PART- B (1 X 14 = 14 Marks)

11. Enumerate the various classes of antitubercular drugs. Write the synthesis & mode of action of Isoniazid?
12. Define Beta lactam antibiotics and explain the classification, SAR and mode of action of cephalosporins?
13. Write the life cycle of malaria parasite and Write the synthesis and mode of action of the Chloroquine?

PART - C (5 X 8 = 40 Marks)

14. Write the chemical degradation of pencillin?
15. Write the SAR and uses of Tetracycline?
16. Write the structure, synthesis, mode of action and uses of Chloramphenicol?
17. Write a note on Prodrugs?
18. Write the structure, synthesis, mode of action and uses of Nitrofurantion?
19. Write the mode of action and SAR of Sulphonamides?
20. Write a short note on combinatorial chemistry?
21. Write the structure, synthesis, mode of action and uses of Miconazole?
22. Write the structure, synthesis, mode of action and uses of Mebendazole?



Code No. 12286 / PCI

FACULTY OF PHARMACY

B. Pharmacy VI-Semester (PCI) (Main & Backlog) Examination, September 2021

Subject: Pharmacology - III

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 What are antiemetics?
- 2 What are nasal decongestants?
- 3 Differentiate between purgatives and laxatives.
- 4 Define the following terms
 - a. Circadian rhythm
 - b. circannual rhythm
- 5 What are fluoroquinolones? Give examples.
- 6 Enumerate various antidotes available.
- 7 Define Chronotherapy and write its applications.
- 8 Write a note on appetite suppressants.
- 9 What are the cholinesterase reactivators? Give examples.
- 10 How do carminatives act?

PART- B (1 x 14 = 14 Marks)

- 11 Classify the agents used in treatment of peptic ulcer disease. Write about the pharmacological actions and therapeutic uses of Ranitidine and Omeprazole.
- 12 Write the MOA, adverse effects and therapeutic uses of Reverse transcriptase inhibitors and cisplatin.
- 13 Explain the cell cycle. What are fluoroquinolones? Explain their MOA, therapeutic uses and adverse effects.

PART- C (5 x 8 = 40 Marks)

- 14 Explain the MOA and adverse effects of aminoglycosides and penicillins.
- 15 Write short notes on the pharmacology of H₂ receptor blockers.
- 16 Discuss the symptoms and treatment of heavy metal poisoning.
- 17 Write a note on antimalarial drugs.
- 18 What are protein based drugs? Write short notes on them.
- 19 Write about urinary tract infections.
- 20 Classify antifungal drugs. Write the MOA and adverse effects of amphotericin.
- 21 Discuss the symptoms and treatment of barbiturate poisoning.
- 22 What are immunosuppressants? Classify them.



Code No: 12287/PCI

FACULTY OF PHARMACY

B. Pharmacy VI-Semester (Main & Backlog) Examination, September 2021

Subject: Herbal Drug Technology

Time: 2 Hours

Max. Marks: 75

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

Part – A (7 x 3 = 21 Marks)

- 1 Define “IPR” and “Bioprospecting”
- 2 Write about curcumin
- 3 Explain soxhlet extraction
- 4 Differentiate conventional and organic farming
- 5 Write about any two microbial pesticides
- 6 Write composition and functions of ASUDCC
- 7 What are churnas & bhasmas Write about guar gum and saffron
- 8 Write the underlying principle of homeopathy
- 9 What are the methods for authentication of a herb

Part – B (1 x 14 = 14 Marks)

- 10 Write a detailed account of the guidelines for stability testing of herbal drugs.
- 11 Write a note on: (a) Vitamins as antioxidants (b) Schedule Z.
- 12 Write a short note on (a) Herbal drug industry (b) Traditional Knowledge

Part – C (5 x 8 = 40 Marks)

- 13 Write a note on the role of nutraceuticals in the prevention and management of cardiovascular diseases.
- 14 Write about pharmacokinetic herb drug interactions with examples.
- 16 Present an overview of good agricultural practices.
- 17 Write an account of plant based research institutes in India.
- 18 What is bio piracy? Discuss any three bio piracy cases in India.
- 19 Classify herbal excipients. Write in detail about naturally derived thickening agents.
20. Write the method of preparation and standardization of churnas.
21. Discuss various methods used for processing of herbal materials.
22. Write a note on omega fatty acids and resveratrol.

FACULTY OF PHARMACY

OU-1704-OU-1704



B. Pharmacy VI-Semester (PCI) (Main & Backlog) Examination, September 2021 Subject:

Biopharmaceutics and Pharmacokinetics

Time: 2Hours

Max. Marks: 75

Note: Answer any Seven Questions from Part –A, Any One Questions from Part-B.and Any Five Questions from Part-C

PART – A (7X3 = 21 Marks)

- 1) Define biopharmaceutics
- 2) Mention factors affecting Ahsorption
- 3) Differentiate Passive transport and Active transports.
- 4) Define Absolute bioavailability and relative bioavailability.
- 5) List the factors affecting elimination of drugs.
- 6) Explain Flip-flop method in Extra vascular administration.
- 7) What is apparent volume of drug distribution
- 8) Write the equation for calculating steady state drug concentration for one compartment open model.
- 9) What is proties binding. How it affects bio availability 10)Expand the terms: i. AUC, ii. Vd iii. $t_{1/2}$ iv. K_a v. K_{θ} vi. CLR

Part - B (1 x 14 = 14 Marks)

- 11) Write about in-vitro drug dissolution models.
- 12) How do you estimate the pharmacokinetics parameters (K_{max} and V_{max}) by using Michaelis – Menton equation.
- 13) Discuss about factors influencing absorption of drug in GIT

Part - C (5 x 8 = 40 Marks)

- 14) Write a note on Carrier mediated transport.
- 15) Describe about the physiological barriers to the distribution of drugs. Any three.
- 16) Explain the biliary excretion of drugs.
- 17) Explain the various methods for assessment of bioavailability.
18. Discuss in-Vitro-in-Vivo correlation
19. Explain kinetics of proton binding
20. Write in detail about compartment models.
- 21) Write a note on non-linear pharmacokinetics.
- 22) Explain methods of adjustment of dose and dosage regimen in patients with hepatic failure



FACULTY OF PHARMACY

B. Pharmacy VI-Semester (PCI) (Main & Backlog) Examination, September 2021

Subject: Pharmaceutical Biotechnology

Time: 2 Hours

Max. Marks: 75

Note: Answer any Seven Questions from Part –A, Any One Questions from Part-B. and Any Five Questions from Part-C

PART – A (7X3 = 21 Marks)

1. Define the following:
i) Biotechnology ii) Enzyme immobilization
 2. Write the components of Biosensors
 3. Write significance of enzyme acting on DNA
i) Restriction end nucleases ii) S1 nuclease
 4. Enumerate types of cloning vectors. Add a note on COSMID as vector
 5. What is active immunity?
 6. Write stability tests defined for official vaccines
 7. Give applications involved in Southern blotting technique
 8. How will you transfer gene by conjugation method
 9. How to control foam during fermentation?
 10. Mention six enzymes
- PART- B (1 X 14 = 14 Marks)**
11. Give the principle of rDNA technology along with significance of enzymes. Enlist and explain various methods of screening the recombinants.
 12. Define vaccine. Write the method of preparation and quality control of bacterial vaccine
 13. Discuss production of Penicillin by fermentation process.

PART - C (5 X 8 = 40 Marks)

14. Enlist methods of immobilization of enzymes. Add a note on applications of enzyme Immobilization
15. Explain the applications of Biosensors
16. Write a brief account on production of insulin by rDNA technology
17. Differentiate between 'type II Hypersensitivity' the 'type III Hypersensitivity'.
18. Give role of HAT medium in monoclonal antibody production
19. Write short notes on ELISA technique
20. Differentiate between prokaryote and Eukaryote
21. Describe components and working of fermentor
22. Write short note on vitamin B12 Production by fermentation



FACULTY OF PHARMACY

B. Pharmacy VI-Semester (PCI) (Suppl.) Examination, March 2021

Subject : Medicinal Chemistry-III

Time: 2 Hours

Max. Marks: 75

Note: Answer Any Seven Questions from Part –A, Any one Question from Part-B.
and Any Five Questions from Part-C

PART – A (7 X 3 = 21 Marks)

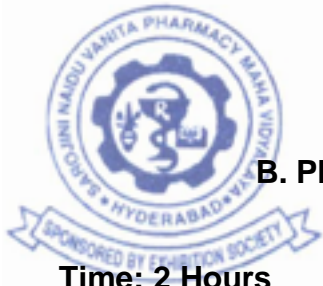
- 1) Define & classify antibiotics?
- 2) Write the structure of Sulbactam & Monobactam?
- 3) Write the structure and uses of Streptomycin?
- 4) Write the structure of Chloroquine & Ethambutol?
- 5) Write the structure and uses of Dapsone?
- 6) Define Partition coefficient, Taft's steric parameter?
- 7) Write the mechanism of action of Aminoglycosides?
- 8) Write the mechanism of action of Macrolides?
- 9) Define prodrugs?
- 10) Write the mode of action of anti-fungal agents?

Part - B (1 x 14 = 14 Marks)

- 11) Write the various classes of antitubercular drugs. Write the synthesis & mode of action of Isoniazid?
- 12) Define Beta lactam antibiotics and explain the classification, SAR and mode of action of Penicillins?
- 13) Write the mode of action and SAR of Sulphonamides and Write the synthesis of Sulfamethoxazole?

Part - C (5x8 = 40 Marks)

- 14) Write the chemical degradation of Cephalosporins?
- 15) Write the SAR and uses of Tetracycline?
- 16) Write the structure, synthesis, mode of action and uses of Chloramphenicol?
- 17) Write a note on Prodrugs?
- 18) Write the structure, synthesis, mode of action and uses of Ciprofloxacin?
- 19) Write the structure, synthesis, mode of action and uses of Trimethoprim?
- 20) Write a short note on combinatorial chemistry?
- 21) Write the structure, synthesis, mode of action and uses of Tolnaftate?
- 22) Write the structure, synthesis, mode of action and uses of Mebendazole?



Code No: 12012/PCI

FACULTY OF PHARMACY

B. Pharmacy VI-Semester (PCI) (Suppl.) Examination, March 2021

Subject : Quality Assurance

Time: 2 Hours

Max. Marks: 75

**Note: Answer Any Seven Questions from Part –A, Any one Question from Part-B.
and Any Five Questions from Part-C**

PART – A (7 X 3 = 21 Marks)

- 1 Define ISO 14000
- 2 Define Quality by design (QbD)
- 3 Define Quality Assurance.
- 4 Define GMP.
- 5 Explain out of trend (OOT)?
- 6 What is Warehousing? Explain.
- 7 Explain on out of specification.
- 8 What is Sources of impurities? Explain.
- 9 What is calibration. Why it should be bone for equipment
- 10 What is SOP.? Explain.

Part - B (1x 14 = 14 Marks)

- 11 Write briefly about Quality control test for secondary packing materials.
- 12 Define ICH. Explain about ICH Guidelines.
- 13 Write briefly about importance, scope of validation and types of validation.

Part - C (5x 8 = 40 Marks)

- 14 Describe SOP, Quality audit and Quality Review.
- 15 Write a short note on Total Quality Management (TQM)
- 16 List out what are the different analytical instrumentation used in the estimation of impurities.
- 17 Explain about validation master plan.
- 18 Explain about Personnel responsibilities, training, and hygiene
- 19 Write a short note on ISO 9000 series?
- 20 Explain about Equipment selection, purchase specifications and maintenance
- 21 Explain ISO certification procedure and its advantages?
- 22 Write briefly about Quality control test for containers.



Code No: 12011/PCI

FACULTY OF PHARMACY

B. Pharmacy VI-Semester (PCI) (Suppl.) Examination, March 2021

Subject : Pharmaceutical Biotechnology

Time: 2 Hours

Max. Marks: 75

Note: Answer Any Seven Questions from Part –A, Any one Question from Part-B.
and Any Five Questions from Part-C

PART – A (7 X 3 = 21 Marks)

- 1 What is biosensor? Write the main components used in biosensor.
- 2 What is genetic engineering?
- 3 Explain restriction endonucleases.
- 4 What are vectors? Write the ideal properties of vectors.
- 5 Write few applications of hybridoma technology.
- 6 What are toxins? Explain the method of conversion of toxin to toxoid.
- 7 Write the preparation and uses of human fibrinogen.
- 8 Write about types of aerators in Fermentor.
- 9 Write a brief note on plasmids.
- 10 Differentiate between prokaryotic and Eukaryotic organisms.

Part - B (1 x 14 = 14 Marks)

- 11 Discuss the structure and function of Major Histocompatibility Complex.
- 12 Explain the typical structure of Immunoglobulin and types of Antibodies.
- 13 What are plasma substitutes? Explain the manufacturing of plasma substitutes and standardization.

Part - C (5x 8= 40 Marks)

- 14 Write a brief notes on Protein Engineering
- 15 Explain the steps involved in PCR.
- 16 Explain insertion and replacement vectors (Bacteriophage vector)
- 17 Discuss the general methods of preparation of vaccines.
- 18 Explain Southern blotting technique.
- 19 Explain generalized transduction and specialized transduction.
- 20 What are mutations? Explain the types of mutations.
- 21 Draw a neat labeled diagram of a typical fermentor.
- 22 Explain the aeration and agitation process in fermentation.

**FACULTY OF PHARMACY****B. Pharmacy VI-Semester (PCI) (Suppl.) Examination, March 2021****Subject : Biopharmaceutics & Pharmacokinetics****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 Noyes and Whitney equation and its application.
- 2 What is Lipinskis rule of five?
- 3 Differentiate between plasma protein-drug binding and tissue drug binding.
- 4 Define Microconstants and Hybrid constants and write relationship between them.
- 5 What is Flip-Flop Phenomenon and how it is useful in method of residual?
- 6 What are the different methods used to calculate the AUC?
- 7 Define orange book and objectives of bioavailability studies.
- 8 Difference between Absolute bioavailability and Relative bioavailability.
- 9 Define Creatinine and how to calculate the Creatinine Clearance
- 10 If Vd of thiopental is 2000ml. Calculate the amount of drug in the body when plasma concentration is 2 μ g/ml.

PART- B (1x14=14 Marks)

- 11 Define absorption. Write in detail about mechanism of drug absorption with diagram.
- 12 Explain in detail about Bioequivalence study protocols.
- 13 Derive Michaelis-Menten equation and how do you estimate Km and Vmax.

PART- C (5x8=40 Marks)

- 14 Write in detail about pH partition hypothesis and its limitation.
- 15 Write about Gastric emptying rate and Volume of distribution.
- 16 Significance and kinetics of protein drug binding.
- 17 What are the factor causing Non-Linearity?
- 18 How do you calculate absorption rate constant, Ka by using Wagner Nelson method?
- 19 Explain the pharmacokinetic parameters of a drug which follows one compartment open model when given by intravenous bolus with relevant mathematical equations.
- 20 What are the different methods for Assessment of Bioavailability?
- 21 Explain various cross over designs in Bioequivalence studies.
- 22 A 60 kg male received 2mg/kg of a drug orally. The following plasma concentration vs time data is obtained. Assume the drug follows one compartment open model and it is completely absorbed. Calculate all possible pharmacokinetic parameters.

Time(hr)	1	2	3	4	5	6	8	10	12	14
Plasma Conc. (μ g/ml)	3.2	7.3	9.1	9.7	9.7	9.2	7.1	5.3	4.0	3.0



Code No: 12009/PCI

FACULTY OF PHARMACY

B. Pharmacy VI-Semester (PCI) (Suppl.) Examination, March 2021

Subject : Herbal Drug Technology

Time: 2 Hours

Max. Marks: 75

Note: Answer Any Seven Questions from Part –A, Any one Question from Part-B. and Any Five Questions from Part-C

PART – A (7 X 3 = 21 Marks)

- 1 What is Tridosha
- 2 What are Biopesticides
- 3 Define the term nutraceuticals
- 4 Write the health benefits of Amla.
- 5 What are advantages of Herbal Excipients.
- 6 Define the term Cosmetics.
- 7 Define the term patent and farmers right
- 8 What do you mean by evaluation of drugs?
- 9 List plant based government research institutes in India.
- 10 Write a note on Biopiracy.

Part - B (1x 14 = 14 Marks)

- 11 Briefly explain good agricultural practices in cultivation of medicinal plants.
- 12 What is traditional knowledge. Explain patenting aspects of Traditional knowledge and natural products.
- 13 Briefly explain the objectives and components of Schedule-T.

Part - C (5x 8 = 40 Marks)

- 14 List the Ayurvedic formulations and write the preparation of Bhasma.
- 15 Explain the principles of Siddha system of medicine.
- 16 Discuss the future prospects of Herbal drug industry.
- 17 Write a detailed account of case study of Neem and Curcuma.
- 18 Write the methods of stability testing of herbal drugs.
- 19 Write note on herbal binders and diluents.
- 20 Write the possible side effects and interactions of garlic and pepper.
- 21 Write the role of Honey and Alfa alfa as health food.
- 22 Write about pest management in medicinal plants.



Code:6226/PCI

FACULTY OF PHARMACY

B. Pharmacy VI-Semester (PCI) (Main) Examination, December 2020

Subject: Quality Assurance

Time: 2 Hours

Max. Marks: 75

PART – A

Note: Answer any Seven questions.

(7 x3=21 Marks)

1. Define TQM
2. Give difference between Quality Assurance & Quality Control.
3. State the purpose of ICH.
4. Name Quality Control tests for glass containers.
5. Name different parameters of Analytical method validation.
6. Name any four responsibilities of Quality control people.
7. Mention classification of Recall.
8. What is qualification and validation .
9. Enlist the scope for validation.
10. Give the principles of NABL accreditation.

PART – B

Note: Answer One question.

(1 x14=14 Marks)

11. a) Define Quality by Design.
b) Write in detail note on QbD.
12. Write a short note on plant layout with example.
13. Explain Good Warehousing practices.

PART - C

Note: Answer any Five questions.

(5x8=40 Marks)

14. Write in detail Equipment Validation.
15. Draw cause and effect diagram for tablet manufacturing process.
16. Write in detail parameters to be checked in Quality Audit.
17. Write short note on ISO 9000.
18. Explain in short Good Laboratory practices.
19. Explain steps involved in complain handling.
20. Explain the term “validation Master Plan”.
21. What is forced degradation stability study? Explain in short.
22. Write a note on Quality Management System.



OU-1704-OU-1704



Code No: 6225/PCI

FACULTY OF PHARMACY

B.Pharmacy VI-Semester (PCI) (Main) Examination, November 2020

Subject : Pharmaceutical Biotechnology

Time: 2 Hours

Max. Marks: 75

PART – A

Note: Answer any Seven questions.

(7 x3=21 Marks)

1. Enlist applications of biotechnology to pharmaceutical industry.
2. Describe the terms biosensor and bioreactor.
3. Write significance of enzyme acting on DNA.
i) Polymerase ii) Ligase
4. Describe the importance linkers and adapters.
5. What is toxoid. Give examples
6. What are plasma substitutes?
7. Define the following :
i) Immunoblotting ii) Immuno suppression.
8. How will you transfer gene by transduction method?
9. Define fermentation.
10. Write six enzymes.

PART – B

Note: Answer One question.

(1 x14=14 Marks)

11. Explain benefits of recombinant DNA products. Write a detailed account on human insulin production by rDNA technology
12. What is Hybridoma technology? Explain the steps involved in the production of monoclonal antibodies and applications.
13. Describe Microbial biotransformation and its pharmaceutical applications.

PART - C

Note: Answer any Five questions.

(5x8=40 Marks)

14. Explain the concept of enzyme immobilization. Comment on its applicability with suitable examples.
15. Write short notes on production of amylase.
16. Write short notes on interferon production by rDNA technology.



Code No: 6225/PCI

-2-

17. Write a short note on PCR.

18. Differentiate between humoral mediated immunity and cell mediated immunity.

19. Give an account of collection, processing & storage of whole human blood.

20. What is southern blotting? Give details of southern blotting and application.

21. Enlist various criteria to be considered in designing of a fermentor, Draw a neat schematic labelled diagram of fermentor.

22. Write short notes on antibiotic production by fermentation with suitable example.

OU-1704-OU-1704



Code No: 6221/PCI

FACULTY OF PHARMACY

B.Pharmacy VI-Semester (PCI) (Main) Examination, November 2020

Subject : Medicinal Chemistry - III

Time: 2 Hours

Max. Marks: 75

PART – A

Note: Answer Seven Questions.

(7 X 3 = 21 Marks)

1. Write the general synthesis of sulfonamides.
2. What are folate reductase inhibitors?
3. Give the mechanism of action of Trimethoprim.
4. Mention any six quinolone drugs.
5. What are Monobactams?
6. Classify antitubercular agents with examples.
7. Mention any six sulfonamide drugs
8. Mention any six antifungal agents
9. Mention any six antiviral drugs.
10. Mention any six antiprotozoal agents?

PART – B

Note: Answer One Question.

(1X14 = 14 Marks)

11. a) Write a note on B-lactam antibiotics
b) Write a note on tetracyclines.
12. a) Write the classification of antifungal agents
b) Give the synthesis, mechanism of action and uses of any one antifungal drug.
13. a) Write a note on Tetracyclines.
b) Write a note on Anti-protozoal agents.

PART – C

Note: Answer Five Question.

(5X8 = 40 Marks)

14. Discuss the SAR of semi-synthetic Penicillins.
15. What are prodrugs? Write the classification of Prodrugs based on functional groups.
16. Write the synthesis and mechanism of any two sulfa drugs.
17. Give a note on Artemisinin derivatives.



Code No: 6221/PCI

-2-

18. Write the synthesis, mode of action and therapeutic uses of Isoniazid and Para amino salicylic acid
19. Write a note on Anti-HIV drugs.
20. Write the synthesis and mechanism of Diethylcarbamazine citrate and Metronidazole.
21. Write about Quinoline antibiotics.
22. What are β -lactam antibiotics? Write their mechanism of action.

OU-1704-OU-1704



Code No: 6224/PCI

FACULTY OF PHARMACY

B. Pharmacy VI-Semester (PCI) (Main) Examination, November 2020

Subject : Biopharmaceutics and Pharmacokinetics

Time: 2 Hours

Max. Marks: 75

PART – A

Note: Answer Seven Questions.

(7 X 3 = 21 Marks)

- 1) Mention the factors effecting elimination of drugs
- 2) List the factors influencing absorption of drugs through GIT
- 3) Differentiate tissue binding and protein binding.
- 4) Write the markers used in renal clearance.
- 5) Define Bioavailability.
- 6) Expand the terms i. $A \cup C$ ii. $t_{\frac{1}{2}}$ iii. V_d iv. IV v. K_a vi. E_E
- 7) What is $t_{\frac{1}{2}}$ what is its importance
- 8) Write the equation for calculating loading dose.
- 9) What is apparent volume of distribution and its importance
- 10) What are the factors for cause of non-linear kinetics.

PART – B

Note: Answer One Question.

(1X14 = 14 Marks)

- 11) Write about in - vitro drug dissolution models
- 12) Derive mathematical equations used to calculate Pharmaco-Kinetic parameters following IV bolus administration blood data, assuming that the drug follows two compartment open model.
- 13) Discuss about protein binding and various factors affecting drug-protein binding.

PART – C

Note: Answer Five Question.

(5X8 = 40 Marks)

- 14) Discuss the mechanism of Active diffusion in absorption of drugs.
- 15) How the organ size and perfusion rate influence the drug distribution?
- 16) Explain briefly about Kinetics of protein binding.



Code No: 6224/PCI

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OU-1704-OU-1704



Code No: 6224/PCI

-2-

- 17) Explain factors affecting the renal excretion of drugs.
- 18) Discuss about *in vitro-in vivo* correlations
- 19) A drug has a volume of distribution of 12Lts and elimination rate constant of 0.18hr^{-1} . A steady state concentration of $12\mu\text{g/ml}$ is desired. Assuming one compartment kinetics, calculate time required to reach 99% of C_{ss} and infusion rate to achieve desired steady state.
- 20) Write the significance of different volumes of distribution in two compartment model.
- 21) Write a note on non-linear pharmacokinetics and Michaelis Menton equation.
- 22) How do you determine absorption rate constant, K_a by Wagner nelson method.

OU-1704-OU-1704



Code No:6223/PCI

FACULTY OF PHARMACY

B. Pharmacy VI-Semester (PCI) (Main) Examination, November 2020

Subject : Herbal Drug Technology

Time: 2 Hours

Max. Marks: 75

PART – A

Note: Answer Seven Questions.

(7 X 3 = 21 Marks)

- 1) What is Organic farming.
- 2) Define the term Herbal medicine as per WHO.
- 3) Mention any six names of Aycervedic preparations (formulations)
- 4) What is significance of Herbal excipients
- 5) Write the health benefits of herbal medicines.
- 6) Define the term Nutraceuticals
- 7) List the parameters for evaluation of herbal tablets.
- 8) Define the term patent and IPR.
- 9) What is schedule T
- 10) What are antioxidants and give examples.

PART – B

Note: Answer One Question.

(1X14 = 14 Marks)

- 11) Briefly explain the objectives and components of Schedule-T
- 12) List the Ayurvedic formulations and write the preparation of any three.
- 13) Explain the WHO guidelines for the assessment of herbal drugs.

PART – C

Note: Answer Five Question.

(5X8 = 40 Marks)

- 14) How will you perform selection and identification of herbal materials?
- 15) Briefly explain the principles of Homeopathic system of Medicine.
- 16) Write a note on Functional foods and Dietary supplements.
- 17) Give informative note on Health benefits of nutraceuticals in management of diabetes.
- 18) What are excipients and give its classification with examples.
- 19) What are phytosomes? Give its method of preparation.
- 20) Give a detailed account of case study of neem and curcumin.
- 21) Explain the objectives and functions of ASU and DCC.
- 22) Give an informative note on future prospects of herbal drug industry.



Code No: 6222/PCI

FACULTY OF PHARMACY

B. Pharmacy VI-Semester (PCI) (Main) Examination, November 2020

Subject : Pharmacology - III

Time: 2 Hours

Max. Marks: 75

PART – A

Note: Answer Seven Questions.

(7 X 3 = 21 Marks)

- 1) What is asthma. Give four examples of drugs used in Asthma
- 2) What is ulcer. Give four examples of drugs used in ulcer.
- 3) What is the treatment for organophosphorus poisoning?
- 4) What is teratogenicity and give examples of drugs causing teratogenic effects.
- 5) Define Chronopharmacology.
- 6) What are the uses of sulfa drugs mention any four sulfa drugs.
- 7) What is amoebiasis Give any four examples of drugs.
- 8) What is BCG? What for it is used
- 9) Give two examples for Bronchiodilators and explain how they work?
- 10) Define Expectorant. Give two examples.

PART – B

Note: Answer One Question.

(1X14 = 14 Marks)

- 11) Classify anticancer agents. Add a note on antimetabolites.
- 12) Write the symptoms and management of Heavy metal poisoning.
- 13) Explain the pharmacological role of H₁ and H₂ antihistaminics.

PART – C

Note: Answer Five Question.

(5X8 = 40 Marks)

- 14) Write a note on sulfanamides.
- 15) Explain about Proton pump Inhibitors.
- 16) Write a note on Immunosuppressant's.
- 17) Explain the chemotherapy of Anti-TB drug.
- 18) Write a note on Penicillins.
- 19) Write a note on ant tubercular agents.
- 20) Write a note on antimalarial drugs.
- 21) Write the pharmacology of respirations stimulants
- 22) What are the different types of rhythms. Explain about circadian rhythm with example.



OU-1704-OU-1704