

III Pharm D

ADICHUNCHANAGIRI UNIVERSITY
Pharm D III Year Examination – July 2021

TIME: 3 Hours

MAX.MARKS: 75

SUB: Pharmacology-II

QP CODE: 44301

- Instructions:**
1. Your answer should be specific to the questions asked.
 2. Write the same question numbers as they appear in this question paper.
 3. Write Legibly.
 4. Draw neat labelled diagrams wherever necessary.

Long Essay: Answer any Two

2X10=20

1. What is cancer? Classify anticancer agents with examples. Write the mechanism of action, adverse effects and therapeutic effects of methotrexate/mercaptopurine
2. Name the causative organisms of malaria. Classify antimalarials with examples. Write the mechanism of action, adverse effects and therapeutic effects of chloroquine
3. Define Gene Expression and Give genetic elements that controls gene expression

Short Essay: Answer any Seven

5X7=35

4. What are signs and symptoms of mercury poisoning?
5. Classify antifungal agents with examples. Write the antifungal spectrum, mechanism of action, adverse reactions and therapeutic uses of Amphotericin B.
6. Classify immunosuppressants with examples. Write the pharmacology of cyclosporine.
7. Factors regulating Transcription
8. Define immunostimulant and immunosuppressant with two examples.
9. Treatment for iron/lead/arsenic poisoning
10. What are drugs used in treatment of round worm infection?
11. What are different types of leprosy? Classify antileprotic drugs with examples.

Short Answers: Answer All the questions

2X10=20

12. What is therapeutic index?
13. Super infection

PTO

14. Restriction Point
15. Recombinant DNA technology
16. Mutation
17. Four uses Chloramphenicol
18. Co trimoxazole
19. What is bacterial resistance
20. What is Cinchonism
21. Enlist the drugs causing ototoxicity

ACU, 02-07-2021 at 9:30 am - 12:30 pm

ADICHUNCHANAGIRI UNIVERSITY
Pharm.D III Year Examination – July 2021

TIME: 3 Hours

MAX.MARKS: 70

SUB: Pharmaceutical Formulations
Q P Code: - 44306

- INSTRUCTIONS:**
1. Your answer should be specific to the questions asked.
 2. Write legibly.
 3. Write the same question numbers as they appear in this question paper.
 4. Draw neat labelled diagrams wherever necessary.

Long Essay: Answer any Two

2X10=20

1. Classify granulation techniques. Describe the wet granulation method along with equipment used in each step.
2. (a) Emphasize on different stages involved in sugar coating of compressed tablets.
(b) Describe the defects in film coating process.
3. Describe the formulation requirements for the manufacture of parenterals.

Short Essay: Answer any Six

6X5=30

4. Write the filling of hard gelatin capsules.
5. Describe formulation of ophthalmic suspensions.
6. Explain the various methods used for filling of liquid orals.
7. Write the various formulation approaches used in transdermal drug delivery systems.
8. Write a note on ocusert.
9. Give the quality control tests for hard gelatin capsules.
10. Write various approaches used in parenteral controlled drug delivery system.
11. Explain the manufacturing of ophthalmic ointment.

Short Answers (Answer all the questions)

10x2=20

12. Write any two applications of nasal drug delivery systems.
13. Define nanoparticles.
14. Classify liquid dosage forms with examples.
15. List the manufacturing defects of tablets.
16. Differentiate between hard gelatin and soft gelatin capsules.
17. What are the different methods of sealing of ampoules?
18. Give two formulation approaches in buccal drug delivery.
19. Give examples of two anti-oxidants and preservatives used in liquid orals.
20. Name sterilization methods for eye ointment
21. Write the merits and demerits of glass as a packaging material for parenterals.

TIME: 3 Hours

MAX.MARKS: 70

SUB: Medicinal Chemistry

Q P Code: - 44305

- INSTRUCTIONS:**
1. Your answer should be specific to the questions asked.
 2. Write legibly.
 3. Write the same question numbers as they appear in this question paper.
 4. Draw neat labelled diagrams wherever necessary.

Long Essay: Answer any Two

2X10=20

1. Classify cephalosporins. Explain the SAR of tetracyclines and give the synthesis of chloramphenicol (2+5+3)
2. Classify anti malaria with examples. SAR of 7-chloro-4-amino quinolines. Outline a method of synthesis for pamaquine and Chloroquine
3. Classify sulfonamides with examples. Give the SAR and MOA of sulfonamides. Give the synthesis of sulamethoxazole.

Short Essay: Answer any Six

6X5=30

4. Give the SAR of sulfonylurea and a method of synthesis for tolbutamide.
5. Write the Hansch and free Wilson methods for QSAR with their merits and demerits.
6. SAR of thiazide diuretics. Synthesis of Ethacrynic acid.
7. Write a note on anti-thyroid drugs. SAR of thyroid hormones.
8. SAR of quinolone antibacterials. Outline the synthesis for tolnaftate.
9. Synergistic action of cotrimoxazole and outline a method of synthesis for dapsone.
10. Classify anti neo plastics. Write on MOA of anti metabolites with examples.
11. Outline a method of synthesis for verapamil and propranolol.

Short Answers (Answer all the questions)

10x2=20

12. MOA of alkylating agents as anti neoplastic agents.
13. What are anti viral agents? Give examples of 2 anti viral drugs.
14. Difference between a carrier prodrug and bioprecursor.
15. Write the structure and uses of 1) Cetylpyridium chloride 2) Hexyl resorcinol
16. Give structure and uses sulfamethoxazole and trimethoprim.
17. Give structure and use of Iodipamide and fluorescein sodium.
18. Give examples of anti protozoal agents.
19. Classify anthelmintics.
20. Structure and use of estradiol and nandrolone.
21. Anti tubercular agents.

ADICHUNCHANAGIRI UNIVERSITY
Pharm.D III Year Examination – July 2021

TIME: 3 Hours

MAX.MARKS: 70

SUB: Pharmaceutical Jurisprudence

Q P Code: - 44304

- INSTRUCTIONS:**
1. Your answer should be specific to the questions asked.
 2. Write legibly.
 3. Write the same question numbers as they appear in this question paper.
 4. Draw neat labelled diagrams wherever necessary.

Long Essay: Answer any Two

2X10=20

1. Describe the constitution and function of pharmacy council of India.
2. What are the precedents and subsequent conditions for grant of license to manufacture of drugs specified in schedule C, C1 and X.
3. Explain the design and construction of bonded laboratory

Short Essay: Answer any Six

6X5=30

4. What are the offenses and penalties under narcotic and psychotropic substances Act?
5. Education regulation under pharmacy act 1948
6. Define the terms Coca leaf, Opium and manufactured drugs under NDPS Act 1985
7. Define invention. Give the inventions not patentable according to the patents act
8. What are the procedures followed by drug inspector for the withdrawal of the sample
9. Discuss the role of pharmacist in relation to his job
10. Define magic remedy. Write the classes of advertisements prohibited under Drugs and Magic Remedies Act
11. State the objectives of Drug Price Control Order 1995. How do you calculate retail price of drug formulation

Short Answers (Answer all the questions)

10X2=20

12. What is Repacking licence
13. Define Schedule N
14. Explain the term "cruelty to animals"
15. What is Drugs Enquiry Committee
16. State Indian drug policy
17. Reproduce pharmacist Oath
18. Objectives of Medicinal and Toilet preparation Act
19. Specimen label for Schedule G Drug
20. Define Spurious drugs
21. Qualification of drug inspector

ADICHUNCHANAGIRI UNIVERSITY

Pharm.D III Year Examination – July 2021

TIME: 3 Hours

MAX.MARKS: 70

SUB: Pharmacotherapeutics II

Q P Code: - 44303

- INSTRUCTIONS:**
1. Your answer should be specific to the questions asked.
 2. Write legibly.
 3. Write the same question numbers as they appear in this question paper.
 4. Draw neat labelled diagrams wherever necessary.

Long Essay: Answer any Two

2X10=20

1. Explain the pathophysiology, diagnosis, clinical presentation and management of Pneumonia.
2. Explain pathogenesis and pharmacotherapy induced nausea and vomiting.
3. Write a note on basic principles of cancer therapy. Explain in detail the management of Breast cancer.

Short Essay: Answer any Six

6X5=30

4. Classify urinary tract infection and write its management.
5. Give the classification and management of Urinary Tract Infections.
6. Explain the management of Pharyngitis and sinusitis.
7. Explain the various methods used in the management of acute renal failure.
8. Explain modified DUKE criteria for the diagnosis of Endocarditis.
9. Explain the management of any two fungal infections
10. Discuss the etiopathogenesis and management of Psoriasis.
11. Explain the chemotherapy of leukemia.

Short Answers (Answer all the questions)

10x2=20

12. Write the Life cycle of Malaria.
13. Explain the Treatment for impetigo.
14. What are the clinical manifestations of gout?
15. Enlist allergens for eczema.
16. Enlist diagnostic tests for HIV
17. What are the signs and symptoms of Systemic Lupus Erythematosus?
18. What is pulse therapy?
19. Management of Atopic Dermatitis.
20. Define Septicemia.
21. Explain multi drug resistance Tuberculosis.

ADICHUNCHANAGIRI UNIVERSITY

Pharm.D III year Examination – July 2021

TIME: 3 Hours

MAX.MARKS: 70

SUB: Pharmaceutical Analysis

Q P Code: - 44302

- INSTRUCTIONS:**
1. Your answer should be specific to the questions asked.
 2. Write legibly.
 3. Write the same question numbers as they appear in this question paper.
 4. Draw neat labelled diagrams wherever necessary.

Long Essay: Answer any Two

2X10=20

1. Describe the construction and working of a Gas Chromatography? Emphasize on the ideal characteristics of stationary phases and mobile phases used in Gas Liquid Chromatography
2. a) Derive Beer's and Lamberts Law b) what are the applications advantages and limitations of Beer's law.
3. Describe the preparation, activation of plates & adsorbents used in the TLC & write its application.

Short Essay: Answer any Six

6X5=30

4. Explain briefly the instrumentation of HPLC
5. Discuss different sample handling techniques in IR spectroscopy
6. Compare the principle techniques limitations and application of paper chromatography with electrophoresis.
7. Explain the principle underlying "Dead- Stop end point technique" and Null point potentiometry.
8. Describe the terms fluorescence & phosphorescence Depict both the phenomena by energy diagram
9. What is the basic requirement for a nucleus to exhibit NMR phenomenon?
10. Write a note on ICH Guidelines
11. Define Validation? Classify and explain each type in brief.

Short Answers (Answer all the questions)

10x2=20

12. What is the principle in Amperometric Titrations.
13. Define Specific Conductance & Equivalent conductance
14. What is a wave number? What unit is used to express it?
15. Define and explain quality assurance.
16. Define R_f value. Write its significance.
17. Define Red & Blue Shift with example
18. Why is DME used? What are the advantages ?
19. Write the statement of Bragg's law.
20. Write a note on temperature programming and its importance on GC.
21. How is the efficiency of an ion-exchange resin measured?
