

**Manipal College of Pharmaceutical Sciences
Manipal Academy of Higher Education, Manipal
Third Year PharmD University Examinations (Theory), July
2021**

Course Code: PQA3.2T. Course Title: Pharmaceutical Analysis

Date: 04.08.2021.

Duration: 2 hrs. (2:30 -4:30pm)

Max. Marks: 50

Instructions: Answer ALL questions

Long Answer Questions (2 X 10 marks) = 20 Marks

1. 1A. Explain the working of HPLC instrument with the help of a schematic diagram. (5 marks)

- 1B. Explain the principle of "Flame ionization detector" in GC. (5 marks).

2. 2A. Explain the principle of glass electrode with the help of necessary equations. (5 marks).

- 2B. Plot the conductometric titration curve and explain the shape of the titration curve for the titration of a weak acid with a weak base. (5 marks)

Short Answer Questions (6 x 5 marks) = 30 marks

3. Enlist and explain the different types of electronic transitions involved in UV/Visible spectroscopy.

4. With the help of neat and labelled diagram write a note on Bolometer detector used in IR spectroscopy.

5. 5A. How to analyse non-fluorescent compound by fluorimetry? Explain with one representative example. (3Marks)

- 5B. Write the Larmor equation with the terms involved therein. (2 Marks)

6. What is Plasma? Mention the various types of plasma sources in atomic spectroscopy.

7. Write a short note on Statistical Process Control (SPC).

8. Enlist the difference between Circular Dichroism (CD) and Optical Rotatory Dispersion (ORD).



**MANIPAL COLLEGE
OF PHARMACEUTICAL SCIENCES**
MANIPAL
(A constituent unit of MAHE, Manipal)

Manipal Academy of Higher Education
Third Year PharmD Degree Examination- July 2021
Subject Code: PPR 3.3T Subject: Pharmacotherapeutics-2

Date: 30-07-2021 Duration: 2 Hour (Time: 2.30 to 4.30 PM) Max. Marks: 50

Instructions:

- **Answer ALL questions.**
- **Draw diagrams wherever necessary.**
- **In each page students must write class, registration no, Name, signature with date.**
- **Students should view before writing and press turn in button after uploading answer before due time or close time.**

Section A: Long Answer Questions (2 x 10 marks = 20 marks)		Marks
1.	Discuss pharmacotherapy management of Multi Drug resistance Tuberculosis.	10 KK
2.	Write the RIFLE classification in Acute Kidney Injury (AKI) and explain the various treatment approaches used in the management of AKI.	10 PKS
Section B: Short Answer Questions (6x 5 marks = 30 marks)		Marks
1.	Define meningitis and encephalitis. Write the treatment regimens for meningitis caused by <i>Streptococcus pneumoniae</i> and <i>Cryptococcus neoformans</i> .	5 PKS
2.	Discuss ACR/EULAR 2010 classification criteria for Rheumatoid arthritis and discuss the role of corticosteroids in the management of same.	5 KK
3.	Define the terms: proto-oncogenes, oncogenes, tumor suppressor genes and write the use of the Gompertzian growth curve.	5 PKS
4.	Enlist various drug class used in management of leukemia and explain any one drug class in detail.	5 KK
5.	Explain the phototherapy used in the management of psoriasis	5 PKS
6.	Enlist various clinical manifestation associated with scabies.	5 KK

Manipal Academy of Higher Education, Manipal

Manipal College of Pharmaceutical Sciences

PharmD Third Year Annual Examination -Jul 2021

Subject: PMA 3.4T Pharmaceutical Jurisprudence

Duration: 2hours

Date: 28 July 2021

Max. Marks: 50

ANSWER ALL QUESTIONS

Long Answer Questions

2 X 10 Marks

- Q1. What are the qualifications, duties, and powers of Drug Inspectors as per The Drugs and Cosmetics Act?
- Q2. Describe the Code of Ethics for Pharmacists related to his job, trade, profession, and medical profession.

Short Answer Questions

6 X 5 Marks

- Q4. Write the specimen labels for Sch H and Sch G drugs. Add a note on conditions to dispense Sch H1 drugs as per The Drugs and Cosmetics Act.
- Q5. What are the powers given to central Govt to control and regulate as per NDPS Act?
- Q6. Write in details the provisions for 'in bond manufacture' of preparations containing alcohol as per The Medicinal and Toilet Preparations Act.
- Q7. Briefly enumerate recommendations of Chopra Committee.
- Q8. Enlist prohibited and exempted advertisements according to Drugs and Magic Remedies Act.
- Q9. Write about constitution and composition of Pharmacy Council of India. What is term of the President and Vice President of the PCI?

Department of Pharmaceutical Chemistry
Manipal College of Pharmaceutical Sciences, MAHE, Manipal

III PharmD University Examinations July 2021
Subject and Subject Code: Medicinal chemistry, PCH 3.5 T

Max. Marks: 50

Time: 2.30pm to 4.30pm

Duration: 2 hrs.

Date: 26-07-21

Instruction: Answer all questions.

Section A: Long answer questions (2 x 10 marks = 20 marks)

- 1A. Classify Antimalarial drugs with one structure under each class. Outline the synthesis of Chloroquine and Mebendazole. 5M
- 1B. Outline the synthesis of the following with their specific uses:
i) Metronidazole ii) Flucytosine iii) Amantadine 5M
- 2A. Classify Antibiotics with examples. Write the structure of the following.
i) Chloramphenicol ii) Chloro tetracycline iii) Ampicillin 5M
- 2B. Write the SAR of Quinolones and Azoles. 5M

Section B: Short answer questions (6 x 5 marks = 30 marks)

- 3A. Write the principle and application of combinatorial chemistry and Prodrugs. 3M
- 3B. Classify Antitubercular drugs by giving examples. Outline the synthesis of INH 2M
4. What are sulpha drugs? Give their mechanism of action. Write 4 salient structural features of sulpha drugs. Outline the synthesis of any one sulpha drug. 5M
5. What are Antimetabolites? Classify them by giving one structure under each class. Outline the synthesis of Cyclophosphamide and Mercaptopurine. 5M
6. Explain the mechanism of action of the following drugs 5M
i) Captopril ii) Metformin iii) Propyl thiouracil iv) Lovastatin v) Nicoumalone
7. How do you synthesise the following compounds 5M
i) Phenylalkylamine containing calcium channel blocker
ii) Second generation, methoxy benzamide containing antidiabetic drug.
8. Classify Antihypertensive agents and Antihyperglycemic agents and give the mechanism for each class. 5M

MANIPAL ACADEMY OF HIGHER EDUCATION, MANIPAL

Third Year PharmD University Examinations, July/ Aug 2021

Course: PCE 3.6T. Pharmaceutical Formulations

Max. Marks: 50

Date: 06-08-2021

Time: 2:30 – 4:30 pm

Note: Answer All Questions. Draw the diagrams wherever necessary

1. Explain Wet granulation method for the preparation of tablets. Mention different Quality Control tests for tablets and explain any ONE test in detail ----- (6+4 Marks)
2. Discuss different routes of parenteral administration ----- 10 Marks
3. Explain Extraction of gelatin with the help of a flow-chart ----- 5 Marks
4. Describe various filling methods for Liquid Orals ----- 5 Marks
5. Explain Rotary Die process which is used to manufacture Soft Gelatin Capsules --- 5 Marks
6. Add a note on Semisolid bases ----- 5 Marks
7. What are different types of transdermal drug delivery systems? Explain any ONE system in detail ---- 5 Marks
8. Mention different Sterilization methods and explain any TWO methods in detail ----- 5 Marks
