

SVKM's NMIMS
SHOBHABEN PRATAPBHAI PATEL SCHOOL OF PHARMACY & TECHNOLOGY
MANAGEMENT / SCHOOL OF PHARMACY & TECHNOLOGY MANAGEMENT

Programme: D.Pharm

Year: II

Part: II

Academic Year: 2021-2022

Subject: Pharmaceutical Chemistry -II

Date: 23 March 2022

Marks: 80

Time: 2.00 pm - 5.00 pm

Durations: 3 Hrs

No. of Pages: 03

Final Examination 2021-2022

Instruction: Candidates should read carefully the instructions printed on the question paper and on the cover of answer book which is provided for their use. (Use only if applicable as the case may be)

NB:

1. Section A is compulsory.
2. Attempt five questions from section B.
3. Section A contain 5 questions of 2 marks each and section B contains 7 questions of 14 marks each.
4. All questions carry equal marks.
5. Answer to each new question to be started on a fresh page.

Figures in bracket on the right hand side indicate full marks.

SECTION A

Q. 1.

(5x2=10M)

A. Give the name and structure of drug containing the following heterocycle

- i) Pyridazine
- ii) Barbituric acid

B. Define

Cardiotonic ii) Anticonvulsants

C. Name two drugs of following categories

Anthelmintic ii) Antifungal

D. Fill in the blanks

The agents that mimic the action of acetylcholine or produce the effect of parasympathetic nerve stimulation are called as _____

_____ are the agents, which increase the volume of urine.

1/3

E. Match the columns

Sr. No.	Column A	Sr. No.	Column B
i)	Fluorescein sodium	a.	Local anesthetics
ii)	Benzocaine	b.	Diagnostic agent
		c.	Anti-hypertensive

SECTION B

Q. 2.

A. Mention physical properties of i) Indomethacin ii) Procaine (2×1 = 2M)

B. Attempt any **THREE** of the following (4×3 =12M)

a) Define and classify NSAIDS with examples.

b) Give name, structure, properties and official preparations of Sulphonamide used for the treatment of eye infection.

c) What is Leprosy? Give structure and uses of Dapsone.

d) Define and Classify Antibiotics according to chemical structure with examples.

Q. 3.

A. Name the drug used for i) Cancer ii) Depression (2×1 = 2M)

B. Attempt any **THREE** of the following (4×3 =12M)

a) Classify Hypnotics and sedatives. Draw structure of Phenobarbitone.

b) What are Antihypertensive drugs? Classify them with examples.

c) What are vitamins? Name four water soluble vitamins with their deficiency symptoms.

d) Write a note on antiseptics and disinfectants.

Q. 4.

A. Give the brand names of i) Cotrimoxazole ii) Imipramine (2×1 = 2M)

B. Attempt any **THREE** of the following (4×3 =12M)

a) Define and classify Antineoplastic with examples.

b) Write a note on antithyroid drugs.

2/3

- c) Draw structure of given chemical name:
 i) 2-bromo-2-chloro-1,1,1 trichloro ethane
 ii) 2-diethyl aminoethyl-4-amino benzoate
 iii) N,N-diethyl, 4-methyl, piperazine-1-carboxamide
 iv) 4-butyl-1, 2-diphenyl pyrazolidine 3,5-dione
 d) Give properties, therapeutic uses and official preparations of Atropine.

Q. 5.

- A. Mention uses of a) Isoniazid b) Diethylcarbamazine (2×1= 2M)
 B. Attempt any **THREE** of the following (4×3 =12M)
 a) What is histamine? Define and classify antihistamines with example. Draw structure of chlorpheniramine
 b) What are sex hormones? Give properties, uses and official preparations of estrogen.
 c) Classify diuretics with examples and explain mechanism of action of any one class in detail.
 d) Define 'Parasympathomimetics'. Give properties and uses of Pilocarpine.

Q. 6.

- A. Give uses of Evans blue and Indigo-carmin (2×1 = 2M)
 B. Attempt any **THREE** of the following (4×3 =12M)
 a) Draw the basic steroidal nucleus with numbering. Give properties and uses of testosterone.
 b) Define 'General anesthetics'. Classify based on their route of administration with examples.
 c) Explain the term "Lipid Lowering Agent". Give properties and uses of Clofibrate.
 d) What are hypoglycemic agents, Classify them with examples

Q. 7.

- A. Name the causative agents of Tuberculosis and Leprosy (2×1 = 2M)
 B. Attempt any **THREE** of the following (4×3 =12M)
 a) Give structure, chemical name, brand names and storage condition of Aspirin.
 b) What are narcotic analgesics? Give classification of narcotics analgesic with examples.
 c) What are 'Local Anaesthetics'? Write structure, give chemical name of local Anaesthetic drug having following chemical feature. i) Ester ii) Amide

d) What are antifungal drugs? Write properties, storage condition and uses of Nystatin.

Q. 8.

A. Mention dosage forms of i) Tolnaftate ii) Sulfacetamide (2×1 = 2M)

B. Attempt any **THREE** of the following (4×3 =12M)

- a) What are analeptics? Give structure, chemical name and uses of caffeine
- b) Define diagnostic agents. Write properties and uses of Evan's blue and congo red.
- c) Draw structure of Pyrimethamine. Give its properties, storage conditions and pharmaceutical uses.
- d) Differentiate general anaesthesia and local anaesthesia. Write the advantages of lignocaine over procaine.