

[BPHARM 0921]

SEPTEMBER 2021
(FEBRUARY 2021 EXAM SESSION)

Sub. Code: 4262

**B. PHARMACY DEGREE EXAMINATION
THIRD YEAR – (NON-SEMESTER)
PAPER II – MEDICINAL CHEMISTRY - I
Q.P. Code: 564262**

Time: Three hours

Answer ALL questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) What are anticonvulsants? Classify it with examples.(5)
b) Write the synthesis for the following drugs.(10)
i) Triclofos Sodium ii) Diazepam iii) Chlorpromazine.HCL iv) Valproic Acid
c) Describe the Structure Activity Relationship of Benzodiazepines.(5)
2. a) Explain the following physiochemical parameters related to biological activity with example.
i) Bioisosterism ii) Protein binding iii) Ionisation iv) Drug-Receptor interaction.

II. Write notes on:

(8 x 5 = 40)

1. Classify Diuretics with suitable examples.
2. Synthesis of Procaine and Dibucaine.
3. SAR of Tricyclic antidepressants.
4. Name some cholinergic blocking agents and write synthesis of Tropicamide.
5. Write the Synthetic route of Furosemide and Amiloride.
6. Add a note on COX I and COX II inhibitors with mechanism.
7. Give some reactions of Phase I Metabolism.
8. Explain the theories of Drug-Receptor interaction.

III. Short answers on:

(10 x 2 = 20)

1. Signal transduction.
2. Structure and use of Mecamylamine Hcl.
3. Reaction product of Malonic ester and urea.
4. Write synthetic route of Ketamine Hcl.
5. Give the structure of any two anti-ulcer drugs.
6. Define Drug Latentiation.
7. SAR of Barbitol.
8. Write about Eicosanoids.
9. Explain Neuromuscular blockers.
10. Write the synthesis of Promethazine Hcl.
