

B.Pharm 2nd Year 2nd Semester Examination-2022
Medicinal Chemistry-I (BP-402T)

FM-100

Time- 3hrs

Answer any five questions taking at least two from each group

Group-A

1. a) What are the cardinal symptoms of inflammations? 1
b) Define and classify non steroidal anti-inflammatory drugs with examples. 3
c) Discuss mode of action and SAR of Salicylic acid derivatives, aryl/Heteroarylacetic acid derivatives/ Indole acetic acid derivatives/ Anthranilic acid derivatives. 16
2. a) Outline synthesis and chemical names of the following 2.5 × 8 = 20
Ibuprofen, Antipyrine, Paracetamol, Phenylbutazone, Tolmetin sodium, Zomepirac sodium, Diclofenac sodium & Meclofenamic acid
3. a) Define and classify general anesthetics with examples. 2.5 × 8 = 20
b) Discuss the various stages of anesthesia
c) What do you mean by preanesthetic medications?
d) Define and classify anticonvulsant drugs with examples.
e) What are various types of seizures?
f) Define and classify antipsychotic drugs with examples
g) Define and classify antidepressants and mood stabilizers with examples.
h) Define and classify antianxiety drugs with examples.
4. a) Define & classify sedative hypnotic drugs with examples. 5
b) Discuss the structure with chemical names of the following 15
Chlordiazepoxide, Diazepam, Lorazepam, Chlorazepam, Clonazepam & Nitrazepam.

Group-B

5. a) Write in details about the biosynthesis and metabolism of catecholamines (CAs). 8
b) Write an account on the SAR of direct-acting sympathomimetics. 4
c) Outline synthesis of the following (*any four*): 2 × 4 = 8
i) Propranolol ii) Phenoxybenzamine iii) Guanethidine iv) Ephedrine v) Clonidine
6. a) Discuss in details about the biosynthesis, storage and release of Acetylcholine (Ach). 8
b) Write an account on the SAR of cholinergic drugs? 4
c) Outline synthesis of the following (*any four*): 2 × 4 = 8
i) Carbachol ii) Nicotine iii) Neostigmine iv) Muscarine v) Acetylcholine
7. a) Discuss the SAR of imidazoline-related α-adrenergic agonists. 5
b) Discuss the SAR of selective β-blockers. 5
c) Outline synthesis of the following (*any four*): 2.5 × 4 = 10
i) Metaraminol ii) Oxymetazoline iii) Prazosin iv) Metoprolol v) Terbutaline
8. a) Write in details about different physicochemical factors affecting drug absorption. 19
b) Acidic drug absorbed from which part of the intestinal tract? 1=20