

**Final Year (New) Pharmacy**  
**PHARMACOLOGY AND TOXICOLOGY**  
**(203)**

**Time : Three Hours**

**Maximum Marks : 80**

**Note :** Attempt total *six* questions. Question No.1 is compulsory. From the remaining questions attempt any five.

1. a) Explain the following terms (Any five) 5
- i) Therapeutic index
  - ii) Idiosyncrasy
  - iii) First Pass Effect
  - iv) Antagonism
  - v) Agonist
  - vi) Potency
  - vii) Bioavailability
- b) Write the source of the following drugs (Any five) 5
- i) Morphine
  - ii) Reserpine
  - iii) Chloroquine
  - iv) Tetracycline
  - v) Streptomycin
  - vi) Rifampicin

2. Attempt any two- 2×7

- a) Enlist various routes of administration. Give the advantages and disadvantages of parenteral route.
- b) Explain the term pharmacokinetics. Discuss the various pathways of drug metabolism.
- c) Write short note on:
  - i) Protein Binding
  - ii) Biological Barriers

3. Attempt any two- 2×7

- a) Explain drug to drug interaction. Discuss the pharmacokinetic interactions with suitable example.
- b) Classify general Anaesthetics. Discuss the various stages of general Anaesthesia.
- c) Discuss the pharmacology and adverse drug reaction of morphine.

4. Attempt any two- 2×7

- a) Differentiate between any two
  - i) Sedative and Hypnotics.
  - ii) Narcotic and Non-Narcotic analgesics.
  - iii) General and local Anaesthetics.
- b) Classify epilepsy and antiepileptic drugs. Give the pharmacology of phenytoin.
- c) Write a note on (Any one)
  - i) Anti-Parkinsonism drugs
  - ii) Anti-Gouts drugs

Contd.....

5. Attempt any two-

2×7

- a) Discuss the pharmacology of Adrenaline.
- b) Discuss the mechanism of action and pharmacological action of Digitalis glycoside.
- c) Write a note on any one-
  - i) Antiarrhythmic drugs.
  - ii) Drugs used in angina pectoris.

6. Attempt any four-

4×3½

Give reasons for the following.

- i) Sulfonamides are ineffective in the presence of pus.
- ii) Tetracycline is not given with milk and milk products.
- iii) Vitamin D is given with calcium.
- iv) In the treatment of tuberculosis, drugs are always given in combination. <http://www.rgpvonline.com>
- v) Adrenaline is given with local anaesthetics.

7. Write the category, therapeutic uses and adverse drug reaction of the following (Any 7) 7×2

- i) Verapamil
- ii) Quinidine
- iii) Aspirin
- iv) Phenobarbitone
- v) Furosemide
- vi) Streptomycin
- vii) Rifampicin
- viii) Griseofulvin
- ix) Chloroquine
- x) Amantadine

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8. Attempt any two -

2x7

- a) Give the life cycle of malarial parasite.
- b) Give the mechanism of action, therapeutic uses and adverse reaction of the following.
  - i) Gentamycin
  - ii) Penicillin
  - iii) Sulfonamide
  - iv) Chloramphenicol
  - v) Dapsone
  - vi) Pyrimethamine
  - vii) Methotrexate
- c) Write note on:
  - i) Superinfection.
  - ii) Bacterial Resistance.

