POST GRADUATE EXAMINATION, MAY- 2020

MD PHARMACOLOGY
(PAPER ONE)

GENERAL & BASIC PHARMACOLOGY

[Time allotted: Three hours]   **[Max Marks: 100]**

Note: Attempt all questions
Illustrate with suitable diagrams.

Q. 1. Describe the role of pharmacokinetic principles in designing and optimizing dosage regimens.   **(20)**

Q. 2. Describe ABC drug transporters and their role in drug transport and disposition.   **(20)**

Q. 3. **Describe briefly:**   **(3 x 10 = 30)**

    a. Carcinogenicity testing

    b. Pharmacoeconomics

    c. Pharmacovigilance Program of India

Q. 4. **Write short notes on:**   **(5 x 6 = 30)**

    a. Strategies to reverse drug tolerance

    b. Genetic polymorphism and drug action

    c. Value and limitations of fixed dose-drug combinations

    d. Essential medicines

    e. Inverse agonism and its clinical relevance

_____X_____

POST GRADUATE EXAMINATION, MAY- 2020

MD PHARMACOLOGY
(PAPER TWO)

SYSTEMIC PHARMACOLOGY

[Time allotted: Three hours]   **[Max Marks: 100]**

Note: Attempt all questions
Illustrate with suitable diagrams.

Q. 1. Explain role of modulation of dopaminergic pathway in therapeutics.   **(20)**

Q. 2. What are diuretics? Explain their mechanism of action and their suitability for varied conditions in

therapeutics.   **(20)**

Q. 3. **Describe briefly:**   **(3 x 10 = 30)**

   a. Glycopeptide antibiotics

   b. Pharmacological approaches in pain modulation

   c. GABA modulation in epilepsy

Q. 4. **Write short notes on:**   **(5 x 6 = 30)**

   a. Inhaled corticosteroids

   b. Role of ACE inhibitors in congestive heart failure

   c. Bisphosphonates

   d. Iron therapy in adults

   e. Sumatriptan

_____X_____

POST GRADUATE EXAMINATION, MAY- 2020

MD PHARMACOLOGY
(PAPER THREE)

EXPERIMENTAL PHARMACOLOGY AND BIOASSAYS, SCREENING METHODS, BIOSTATISTICS & QUESTION RELATED TO THESIS WORK

[Time allotted: Three hours]   **[Max Marks: 100]**

Note: Attempt all questions
Illustrate with suitable diagrams.

Q. 1. Describe the screening methods for evaluation of antiepileptic drugs   **(20)**

Q. 2. Describe the following: **(10 + 10 = 20)**

    a. Screening of anti-depressant drugs

    b. Chronic toxicity studies in animals

Q. 3. **Describe briefly:**   **(3 x 10 = 30)**

    a. Recombinant DNA technology

    b. Informed consent document and consenting process

    c. Computational methods in drug discovery

Q. 4. **Write short notes on:**   **(5 x 6 = 30)**

    a. Pragmatic trials

    b. Super fusion cascade technique

    c. Bias in clinical trials

    d. Translational medicine

    e. Chi square test

_____X_____

POST GRADUATE EXAMINATION, MAY- 2020

MD PHARMACOLOGY
(PAPER FOUR)

THERAPEUTICS AND TOXICOLOGY, RECENT ADVANCES IN PHARMACOLOGY

[Time allotted: Three hours]   **[Max Marks: 100]**

Note: Attempt all questions
Illustrate with suitable diagrams.

Q. 1. Describe recent developments in antifungal drug therapy with emphasis on azoles.   **(20)**

Q. 2. Describe the pharmacotherapy of calcium channel blockers. Highlight the important therapeutic

differences between amlodipine and cilnidipine.   **(20)**

Q. 3. Describe briefly: **(3 x 10 = 30)**

   a. Recent advances in pharmacotherapy of carcinoma prostate

   b. Recent advances in pharmacotherapy of rheumatoid arthritis

   c. Antibiotic prophylaxis

Q. 4. Write short notes on: **(5 x 6 = 30)**

   a. Pharmacotherapy of erectile dysfunction

   b. Newer drugs developed in India

   c. Recent advances in pharmacotherapy of obesity

   d. Evolution of iron-chelating therapy

   e. HIV vaccines

_____X_____