#### MD PHARMACOLOGY (PAPER ONE)

#### GENERAL & BASIC PHARMACOLOGY

[Max Marks: 100] [Time allotted: Three hours] Note: Attempt all questions Illustrate with suitable diagrams. Q. 1. Describe phases of clinical trial with special reference to post marking surveillance. (20)Q. 2. Define adverse drug reaction (ADR) and its type giving suitable examples. Describe the methods and (20)challenges in monitoring of ADRs.  $(3 \times 10 = 30)$ O. 3. Describe briefly: a. Clinical significance of plasma half life b. Generic drug prescribing c. Pharmacogenetics  $(5 \times 6 = 30)$ Q. 4. Write short notes on: a. Drug schedules b. Placebo and its significance c. Evidence based medicine d. Off label use of drugs e. Ethics in clinical research

## MD PHARMACOLOGY (PAPER TWO)

#### SYSTEMIC PHARMACOLOGY

[Max Marks: 100] [Time allotted: Three hours] Note: Attempt all questions Illustrate with suitable diagrams. (20)Describe 5HT receptor modulation in therapeutics. Outline the recent ADA guidelines for management of diabetes. What is the current status of DPP-IV Q. 2. (10+10=20)inhibitors in the management of diabetes mellitus?  $(3 \times 10 = 30)$ Q. 3. Describe briefly: a. General considerations in cancer chemotherapy b. Treatment of XDR and XXDR tuberculosis c. Motor performance fluctuations in Parkinsonism and its management  $(5 \times 6 = 30)$ Write short notes on: a. Drugs for treatment of neurocysticercosis b. Uses of botulinum toxin c. Topoisomerase inhibitors d. Current status of long acting bisphosphonates e. Pre-emptive use of antimicrobials X

#### MD PHARMACOLOGY (PAPER THREE)

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

[Max Marks: 100] [Time allotted: Three hours] Note: Attempt all questions Illustrate with suitable diagrams. What are various screening methods for evaluation of diuretic activity? How is tubular site of action of Q. 1. (20)diuretics determined? Q. 2. Outline various phases of drug development from a lead compound to a new drug. Describe role of (20)lead optimization in drug development.  $(3 \times 10 = 30)$ Q. 3. Describe briefly: a. Anti fertility drug screening b. Alternatives to animals in experimental pharmacology c. Value and limitations of bioassays  $(5 \times 6 = 30)$ O. 4. Write short notes on: a. Odds ratio and confidential intervals b. Microdose assay c. Tests of mutagenicity d. Institutional animal ethics committees Citations, impact factor and H - index

## MD PHARMACOLOGY (PAPER FOUR)

### THERAPEUTICS AND TOXICOLOGY, RECENT ADVANCES IN PHARMACOLOGY

[Max Marks: 100] [Time allotted: Three hours] Note: Attempt all questions Illustrate with suitable diagrams. (10+10=20)Q. 1. Discuss the following: a. Iron preparations and their optimal use in therapeutics. b. Drugs used in treatment of obesity. Q. 2. Explain the current status of Gliptins as add-on therapy in diabetes. Write in detail the drugs used for (20)improving post-prandial blood sugar.  $(3 \times 10 = 30)$ O. 3. Describe briefly: a. Antibiotic prophylaxis b. Advances in management of CHF c. Newer approaches for treatment of pulmonary artery hypertension  $(5 \times 6 = 30)$ Q. 4. Write short notes on: a. Schedule H1 drugs b. Recently banned fixed dose combinations (FDCs) c. Role of anti-IGE monoclonal antibodies in chronic asthma d. Drug treatment for sleep onset insomnia e. Recent amendments in schedule Y