JHARKHAND Rai University
RANCHI

Annual/Reappear (Year II) Examination May 2025

Programme: D. Pharm **Full Marks: 80**
Course: Pharmacology **Time: 3 Hrs.**
Course Code: ER20-21T
Enrolment No: _____

Section I

1. **Objective type questions. Answer all questions.** **1 x 20 = 20**

i. Which drug is used as an antidote for organophosphate poisoning?
a. Pilocarpine b. Physostigmine c. Atropine d. Propranolol

ii. Which drug is commonly used for the symptomatic treatment of Myasthenia Gravis?
a. Atropine b. Propranolol c. Neostigmine d. Dicyclomine

iii. Which of the following is an SSRI antidepressant?
a. Amitriptyline b. Fluoxetine c. Diazepam d. Chlorpromazine

iv. Which of the following drugs is used in the treatment of supraventricular arrhythmias?
a.Digoxin b. Lidocaine c. Verapamil d. Propranolol

v. Which drug inhibits vitamin K-dependent clotting factors?
a.Heparin b. Enoxaparin c. Warfarin d. Clopidogrel

vi. Which antiplatelet agent acts by inhibiting ADP receptor on platelets?
a. Aspirin b. Clopidogrel c. Streptokinase d. Heparin

vii. Which of the following is a thrombolytic agent used in myocardial infarction?
a. Aspirin b. Warfarin c. Streptokinase d. Protamine sulphate

viii. A contraindication for anticoagulant therapy includes:
a. Stroke b. Deep vein thrombosis c. Active peptic ulcer d. Atrial fibrillation

ix. Which of the following is a short-acting beta-2 agonist bronchodilator?
a. Salmeterol b. Ipratropium c. Salbutamol d. Montelukast

x. Which drug forms a protective barrier over ulcers and is used as a cytoprotective agent?
a. Omeprazole b. Sucralfate c. Ranitidine d. Bismuth subsalicylate

xi. Which of the following is a loop diuretic?
a. Spironolactone b. Hydrochlorothiazide c. Furosemide d. Amiloride

xii. Vasopressin (ADH) is primarily used in the treatment of:
a. Diabetes mellitus b. Diabetes insipidus c. Hypertension d. Hyperkalaemia

xiii. Levothyroxine is used in the treatment of:
a. Hyperthyroidism b. Hypothyroidism c. Diabetes mellitus d. Addison's disease

xiv. Methimazole is used to treat:
a. Diabetes mellitus b. Hypothyroidism c. Hyperthyroidism d. Osteoporosis

xv. Which of the following drugs is a leukotriene receptor antagonist used in asthma?
a. Salbutamol b. Montelukast c. Tiotropium d. Aminophylline

xvi. Which drug is a proton pump inhibitor (PPI) used in peptic ulcer disease?
a. Ranitidine b. Omeprazole c. Sucralfate d. Antacid

xvii. Which of the following is a second-generation antihistamine with minimal sedation?
a. Diphenhydramine b. Chlorpheniramine c. Loratadine d. Hydroxyzine

xviii. Which of the following is a beta-lactam antibiotic?
a. Ciprofloxacin b. Penicillin G c. Erythromycin d. Tetracycline

xix. Aminoglycosides can cause:
a. Nephrotoxicity and ototoxicity b. Hepatotoxicity c. Hyperkalaemia d. Constipation

xx. Which drug is commonly used in tuberculosis therapy?
a. Amphotericin B b. Isoniazid c. Acyclovir d. Albendazole

Section II

2. **Short Answer type questions. Answer any ten.** **10 x 3 = 30**
   a. Classify anti-convulsant drugs and write the mechanism of action of phenytoin.
   b. Write the pharmacological actions and clinical uses of nitro-glycerine.
   c. Discuss the physiological functions of thyroid hormones and outline two of their clinical applications.
   d. Define chemotherapy? Mention any two principles of chemotherapy.
   e. Define prostaglandins and mention their role in the human body.
   f. Define shock. Write briefly on drug therapy for hypovolemic and cardiogenic shock.
   g. What are the pharmacological actions and uses of atropine?
   h. Classify laxatives. Write indications and contraindications of stimulant laxatives.
   i. Mention two examples of fluoroquinolones and their clinical uses.
   j. Define and classify anti-arrhythmic drugs with one example from each class.
   k. Classify anti-ulcer drugs. Mention the mechanism of action and one example of a proton pump inhibitor.

Section III

3. **Long Answer type questions. Answer any six.** **6 x 5 = 30**
   a. Explain the physiological functions and clinical applications of parathormone, calcitonin, and vitamin D in regulating calcium homeostasis.
   b. Discuss the physiological functions of histamine, serotonin (5-HT), and prostaglandins in biological systems.
   c. Categorize bronchodilators and discuss the pharmacological mechanisms of beta-2 adrenergic agonists, providing relevant examples.
   d. Write down the role of Blood-brain barriers on drug's effect. Write a short note on Plasma Binding Proteins.
   e. Write short notes on anti-fungal and anti-viral drugs with classification, examples, and uses.
   f. Describe the types of angina and the drugs used in its management. Mention the pharmacological actions of nitrates.
   g. Compare and contrast expectorants, mucolytics, and antitussives with examples and clinical uses.

*****