

**Madhya Pradesh Medical Science University,  
Jabalpur  
MBBS Second Professional Examination August-  
2024  
Subject- Pharmacology  
Paper-I (new scheme)**

Time: 3:00 Hours

Maximum Marks :100

**Instructions:**

- a) All questions are compulsory**
- b) Draw diagrams wherever necessary**
- c) Answers of Questions and Sub-questions must be written strictly according to serial order of question paper.**
- d) MCQ has to be answered in theory answer book**
- e) Please write MCQ answer neatly and in serial order with black or blue pen in brackets; for example: - 1. (a) 2. (c)**
- f) MCQ has to be answered only once, any kind of repetition or cutting or erasing or whitener will be considered as malpractice, such answers will not be counted in marks and action will be taken according to UFM rules of university.**
- g) Subjective answer should be answered in up to 30 words per marks. For example, if a question having 2 marks should answered in up to 60 marks.**

## Q1. Total MCQs: 10

$$10 \times 1 = 10$$

1. Which of the following is a prodrug?
    - (a) Ampicillin
    - (b) Captopril
    - (c) Levodopa
    - (d) Phenytoin
  2. Which of the following is an enzyme inhibitor?
    - (a) Ketoconazole
    - (b) Rifampicin
    - (c) Tolbutamide
    - (d) Phenobarbitone
  3. Partial agonist possess:
    - (a) Maximum intrinsic activity and low affinity
    - (b) High intrinsic activity and no affinity
    - (c) Low intrinsic activity and high affinity
    - (d) Low intrinsic activity and low affinity
  4. This anti-platelet drug is a prodrug and blocks P2Y<sub>12</sub> receptor.
    - (a) Aspirin
    - (b) Tirofiban
    - (c) Clopidogrel
    - ~~(d) Abciximab~~
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5. Approved drug for obesity is:

- (a) Topiramate
- (b) Orlistat
- (c) Metformin
- (d) Sibutramine

6. Which of the following anti-histaminic has very less cholinergic side effects?

- (a) Promethazine
- (b) Chlorpheniramine
- (c) Triprolidine
- (d) Loratadine

7. Anticholinergic used pre-anesthetically to reduce secretions is:

- (a) Glycopyrrolate
- (b) Homatropine
- (c) Ipratropium
- (d) Dicyclomine

8. Mechanism of action of Zileuton is:

- (a) Inhibit production of IgE
- (b) Inhibit lipoxygenase
- (c) Inhibit cyclooxygenase
- (d) Inhibit activity of mast cells

9. Antihypertensive which can be used in patients with gout and diabetes mellitus is:

- (a) Thiazide
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- (b) Enalapril
- (c) Propranolol
- (d) Diazoxide

10. Side effect of corneal microdeposits is seen most commonly with which of the following drugs?

- (a) Esmolol
- (b) Amiodarone
- (c) Adenosine
- (d) Bretylium

## Q2. Long Answer Questions

2 x 20 = 40

a. A 42-year-old man complains of recurrent epigastric pain, anorexia, and nausea. Clinical history revealed that pain episodes started 2 years earlier and became frequent for the last two months. The patient had taken antacid as medication to relieve pain. He smokes a pack of cigarettes and 10 cups of coffee daily. Barium meal examination was suggestive of gastric ulcers, which was confirmed by endoscopy. On serological examination, the patient has H. pylori infection.

- I. What will be the treatment of this patient?
- II. Write drugs used for peptic ulcer?
- III. Describe the mechanism of action of proton pump inhibitor?
- IV. Write therapeutic uses and adverse effects of Proton pump inhibitors?

~~b. A 45-year-old male presents to the emergency room~~

with substernal chest pain radiating towards the left shoulder.

- I. What should be its immediate and prophylactic management?
- II. Write the difference between classical and vasospastic angina?
- III. Write the mechanism of action of nitrate and their role in angina pectoris?
- IV. What are the adverse drug effects and therapeutic uses of Nitrates?

### **Q3. Brief Answer Questions**

6 x 05 = 30

- a. Write pharmacotherapy of open-angle glaucoma?
- b. Write therapeutic uses and adverse effects of Angiotensin-converting enzyme inhibitors?
- c. Discuss in short potassium-sparing diuretics?
- d. Classify beta-blockers? Write the role of beta-blockers in Hypertension?
- e. Enumerate atropine substitutes. Write therapeutic uses and ADRs of atropine substitutes used in the eye.
- f. Write the difference between competitive and non-competitive receptor antagonism?

### **Q4. Short Answer Questions**

10 x 2 = 20

- a. Write the rationale for using beta-2 agonists in

bronchial asthma?

- b. Define Pharmacovigilance. Which is the national Reporting Centre in India?
- c. Classify antiemetic drugs?
- d. Explain why edrophonium is the preferred drug for differentiation between cholinergic and myasthenic crisis?
- e. Write the treatment of severe migraine?
- f. Write antihypertensive drugs which are safe in pregnancy?
- g. Write the treatment of acute iron poisoning?
- h. Write complications of thiazide diuretics?
- i. Explain why adrenaline is added to local anesthetics?
- j. Explain why heparin is preferred as an anticoagulant in pregnancy than warfarin sodium?

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