

# 2019 Scheme

Q.P. Code: 212001

Reg. no.: .....

Second Professional MBBS Degree Regular/Supplementary Examinations

August 2025

Pharmacology - Paper II

(GIT, Hormones, Antibiotics, Chemotherapy and Miscellaneous)

Time: 3 Hours

Total Marks: 100

- Answer all questions to the point neatly and legibly. Do not leave any blank pages between answers
- Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together. Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

## 1. Multiple Choice Questions

(20x1=20)

The responses for MCQ questions (Q.No. i to Q.No. xx) shall be written in the space provided for answering MCQ questions at page No. 51 of the answer book (the inner portion of the back cover page (PART III)). Responses for MCQs marked in any other part/page of the answer book will not be valued

### Question Numbers i – v are Single Response Type

- Which of the following drug is a SERM useful for treatment of Osteoporosis  
a) Raloxifen                      b) Bisphosphonates                      c) Strontium                      d) Estradiol
- Failure of oral contraceptives occur when used with any of these except  
a) Aspirin                      b) Tetracycline                      c) Phenytoin                      d) Rifampicin
- The antithyroid drug with the most rapid onset of antithyroid action is  
a) I<sup>131</sup>                      b) Sodium iodide                      c) Methimazole                      d) Propylthiouracil
- Which of the following drugs promote release of endogenous Insulin  
a) Acarbose                      b) Glipizide                      c) Metformin                      d) Pioglitazone
- Which of the following disorder is NOT aggravated by corticosteroid therapy  
a) Congenital adrenal hyperplasia                      c) Hypertension  
b) Diabetes Mellitus                      d) Peptic Ulcer

### Question Numbers vi – x are Multiple Response Type. Read the statements and mark the answers appropriately.

- Which of the following are true about Insulin Lispro  
1) Action is faster and shorter in duration than regular Insulin.  
2) It is given fifteen minutes prior to meals.  
3) Source is Lamb.  
4) Action is faster and of longer duration than regular Insulin.  
a) 1 & 2 are correct                      b) 2 & 3 are correct                      c) 3 & 4 are correct                      d) 4 & 5 are correct
- Ototoxicity of aminoglycoside is increased with concurrent use of which of the following  
1) Azithromycin                      2) Vancomycin                      3) Furosemide                      4) Ciprofloxacin  
a) 1 & 2 are correct                      b) 1 & 3 are correct                      c) 3 & 4 are correct                      d) 2 & 3 are correct
- Which of the following drugs are useful for treatment of Anaerobic infection  
1) Metronidazole                      2) Aztreonam                      3) Imipenem                      4) Clotrimazole  
a) 1 & 2 are correct                      b) 1 & 3 are correct                      c) 2 & 3 are correct                      d) 3 & 4 are correct
- Which of the following are the complications of Zidovudine therapy  
1) Anaemia                      2) Hepatotoxicity                      3) Nephrotoxicity                      4) Cardiotoxicity  
a) 1 & 2 are correct                      b) 1 & 3 are correct                      c) 1 & 4 are correct                      d) 2 & 3 are correct
- Which of the following are Alkylating agents  
1) Cyclophosphamide                      2) Paclitaxel                      3) Busulfan                      4) Vincristine  
a) 1 & 2 are correct                      b) 2 & 4 are correct                      c) 1 & 3 are correct                      d) 2 & 3 are correct

### Question Numbers xi – xv are based on case scenarios. Read the statements and mark the answers accordingly.

A 26 year old female with a two week history of urinary urgency and frequency presents to her primary care physician for evaluation. Urine analysis reveals urinary tract infection and appropriate antibiotic was prescribed

- Which of the following can be prescribed empirically  
a) Ciprofloxacin                      b) Gentamicin                      c) Tetracycline                      d) Procaine penicillin
- Which of the following is a Broad Spectrum antibiotic  
a) Erythromycin                      b) Amikacin                      c) Methicillin                      d) Tetracycline

(PTO)

- xiii. Which of the following is given for prophylaxis of lower UTI  
 a) Amoxicillin                      b) Doxycyclin                      c) Norfloxacin                      d) Gentamicin
- xiv. The drug inhibiting DNA gyrase is  
 a) Azithromycin                      b) Ciprofloxacin                      c) Doxycycline                      d) Amoxicillin
- xv. Which of the following drug causes Nephrotoxicity  
 a) Gentamicin                      b) Erythromycin                      c) Azithromycin                      d) Ofloxacin

**Question numbers xvi – xx consists of statements – Assertion (A) and Reason (R). Answer these questions by selecting the appropriate options given below.**

- a) Both A and R are true and R is correct explanation of A                      c) A is true and R is false  
 b) Both A and R are true and R is not the correct explanation of A                      d) Both A and R are false
- xvi. **Assertion:** Finasteride is used for rapid control of urinary symptoms in a patient with prostatic hyperplasia

- Reason:** It is an androgen receptor antagonist
- xvii. **Assertion:** Progesterone is added to estrogens in hormone replacement therapy  
**Reason:** It decrease the risk of endometrial carcinoma
- xviii. **Assertion:** Neomycin can be used orally for gut sterilization in a patient with hepatic coma  
**Reason:** It has very good oral bio-availability
- xix. **Assertion:** Pyridoxine is commonly added to antitubercular regimen  
**Reason:** Isoniazid competitively inhibits pyridoxal kinase
- xx. **Assertion:** Dexrazoxane is added to doxorubicin containing anticancer therapy  
**Reason:** It prevents anthracycline induced cardiotoxicity

**(2x10=20)**

**Long Essays:**

2. Classify Beta lactum antibiotics. Discuss the mechanism of action, therapeutic uses and adverse effects of third generation Cephalosporins. Discuss the rationale of combining Clavulanic acid with amoxicillin **(3+4+3)**
3. A 28 year old mother with a ten months old baby wants to space out her next child and consults you for taking oral contraceptives.  
 a) Classify oral contraceptive pills, discuss the mechanism of action and adverse effects of combined pills  
 b) Discuss the mechanism of action and uses of Mifepristone.  
 c) Mention two selective estrogen receptor modulators with two uses.  
 d) Discuss why oral contraceptive pills are contra indicated in a patient on treatment for tuberculosis **(4+2+2+2)**

**(6x6=36)**

**Short Essays:**

4. Discuss the uses and adverse effects of Glucocorticosteroids. **(3+3)**
5. Discuss the mechanism of action, uses and adverse effects and Chloroquine. Discuss the management of chloroquine resistant plasmodium falciparum malaria. **(4+2)**
6. Discuss the mechanism of action, uses and adverse effects of Isoniazid. Discuss the pharmacological management of MDR Tuberculosis **(4+2)**
7. Discuss the mechanism of action, uses and adverse effects of Metoclopramide. Discuss the drugs used for Inflammatory bowel disease. **(3+3)**
8. Discuss the mechanism of action, uses and adverse effects of Methotrexate. Discuss the general toxicities of anticancer drugs. **(3+3)**
9. Discuss the mechanism of action, uses and adverse effects of Fluconazole. Discuss the drugs used for topical fungal infection. **(3+3)**

**(6x4=24)**

**Short Answers:**

10. Enumerate "SHARED" decision making.
11. Mention Four Bisphosphonates with their uses.
12. Discuss the drugs used in Iron poisoning.
13. Discuss the mechanism of action, uses and adverse effects of metronidazole.
14. Discuss the mechanism of action, uses and adverse effects of Atorvastatin.
15. Enumerate the common characteristic features of Aminoglycosides.

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