

SAPTHAGIRI NPS UNIVERSITY

MBBS PHASE II University Examinations August / September– 2025

SUBJECT: PHARMACOLOGY PAPER-2 (QP CODE: 1010)

Your answer should be specific to the question asked

Draw neat, labelled diagrams wherever necessary

Maximum Marks: 100

Date: 25/08/2025

Time: 3 hrs

I. Long Essay

2 X 10 = 20 Marks

1. A young newly married female visited OBG opd with complaints of amenorrhea from 2 months. Her urine pregnancy test was positive and she expressed her desire to abort the child. Doctor later performed an USG to rule out ectopic pregnancy and was later prescribed medications to abort the conceptus. She was later advised about different methods of contraception and ultimately was prescribed her on oral contraceptive pills. (3+5+2)
 - a. Classify oral contraceptive pills with examples.
 - b. Explain the mechanism of action and adverse effects of oral contraceptive pills
 - c. Add a note on non-contraceptive uses of OC.
2. A female aged 40 yrs complains of cough since 3 weeks, loss of body weight and unable to eat. On Investigation procedures, she was diagnosed as Pulmonary Tuberculosis. She was advised on Anti Tubercular drugs (2+6+2)
 - a) Classify 1st line Anti Tubercular drugs,
 - b) Write the MOA, Uses and ADR of any one of them.
 - c) Why Corticosteroids are used in TB Meningitis

II. Short Essays

8 X 5 = 40 Marks

3. Dutasteride- Mechanism of action, uses and adverse effects (2+2+1)
4. Write the mechanism of action of statins. Add a note on its uses and adverse effects. (3+2)
5. High ceiling diuretics- mechanism of action, uses and adverse effects.
6. Enumerate the advantages of ACE inhibitors over other anti-hypertensive drugs.
7. Drug Management on myocardial infarction
8. How do you treat a case of falciparum malaria. Mention its other Uses. Add a note on mechanism of action of artemisinin.
9. Immunomodulators
10. Universal Immunization Program- Vaccines covered and Target Population.

P.T.O

III. Short Answers

10 X 3 = 30 Marks

11. Name 3 indications of bromocriptine
12. What are the uses and adverse effects of steroids?
13. Write the common properties of Aminoglycosides.
14. Filgrastim
15. Name 3 Thrombolytic agents
16. What is drug used in Acute Attack of Angina? Write its route of administration and adverse effects.
17. What are beta lactamase inhibitors? Give 3 examples.
18. Name 3 drugs used in treatment of Type 2 Diabetes Mellitus
19. Give one example of a Selective Estrogen Receptor Modulator (SERM) and its use.
20. Name 3 drugs used in cancer chemotherapy.

IV. Multiple Choice Questions

10X 1 = 10 Marks

21.

I) Following are the drugs used against erectile dysfunction except:

- a. Tadalafil
- b. PIPE therapy
- c. Prostaglandin E1
- d. Spironolactone ✓

II) Antidote for heparin overdose

- a. Vitamin K
- b. Protamine sulphate ✓
- c. Lepirudin
- d. Coumarin

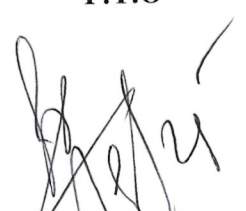
III) Which among the following diuretic doesn't act from the luminal side

- a. Loop diuretics
- b. Osmotic diuretics
- c. Carbonic anhydrase inhibitor
- d. Aldosterone antagonists ✓

IV) Which of the following best defines a nutraceutical?

- a. A drug used to treat nutritional deficiencies
- b. A synthetic chemical used in food preservation
- c. A food or food product that provides medical or health benefits ✓
- d. A vaccine derived from plant sources

P.T.O



V) A known side effect of dihydropyridine CCBs like nifedipine is:

- a. Bradycardia
- b. Peripheral edema ✓
- c. Dry cough
- d. Hypokalemia

22.

I) Identify the drug with post antibiotic effect among the following

- a. Trimethoprim
- b. Aminoglycoside ✓
- c. Beta-lactams
- d. Tetracyclines

II) Drug of choice for Cytomegalovirus (CMV) retinitis is

- a. Acyclovir
- b. Ganciclovir ✓
- c. Oseltamivir
- d. Amantadine

III) BCG vaccine acts as an immunomodulator primarily in the treatment of:


- a. Hepatitis C
- b. Bladder cancer ✓
- c. Rheumatoid arthritis
- d. Asthma

IV) Which of the following drugs is used in Chemotherapy induced vomiting?

- a. Cisplatin ✓
- b. Irinotecan
- c. Doxorubicin
- d. Bleomycin

V) A long-acting GH receptor antagonist used to treat acromegaly is:

- a. Somatropin
- b. Pegvisomant ✓
- c. Octreotide
- d. Leuprolide



SAPTHAGIRI NPS UNIVERSITY

MBBS PHASE II University RESIT Examinations October / November– 2025

SUBJECT: PHARMACOLOGY PAPER II (QP CODE: 1010)

Your answer should be specific to the question asked

Draw neat labelled diagrams wherever necessary

Maximum Marks: 100

Date: 24/10/2025

Time: 3 hrs.

I. Long Essays:

2X10=20 Marks

1. A 40-year-old obese female visits medicine outpatient department with complaints of constant thirst, tiredness and frequently passing urine. On investigation her fasting blood glucose is 134 mg/dl, postprandial blood glucose is 202 mg/dl and glycosylated haemoglobin (HbA_{1c}) is 7.2. Systemic examination and all other laboratory reports were within normal limits. She is diagnosed as suffering from Type II diabetes mellitus. (3+4+3)
 - a) Classify oral antidiabetic drugs.
 - b) Explain the mechanism of action, uses and adverse effects of Metformin.
 - c) Outline the management of diabetic ketoacidosis.
2. A young male aged 25 years reported to outpatient department of a district hospital with history of intermittent attacks of fever & chills since last two days. On investigation with peripheral smear examination, he was positive for plasmodium vivax. He was diagnosed as suffering from malaria. (4+4+2)
 - a) Classify the drugs used in the treatment of malaria.
 - b) Describe the mechanism of action, therapeutic uses and adverse effects of chloroquine.
 - c) Write a short note on ACT (Artemisinin based Combination Therapy).

II. Short Essays:

8X5=40 Marks

3. Mention five uses and five adverse effects of glucocorticoids.
4. Outline the mechanism of action and indications for use of radioactive iodine.
5. Explain the pharmacotherapy of Heart failure.
6. Explain mechanism of action, therapeutic uses, and side effects of Rosuvastatin.
7. Mention fibrinolytics and their uses.
8. Mention the therapeutic uses and adverse effects of Amphotericin – B.
9. Mention the therapeutic uses and adverse effects of Metronidazole.
10. Fixed dose combination of anti-microbial drugs.

III. Short Answers

10X3=30 Marks

11. What are the indications for use of oral contraceptive pills besides contraception?
12. Rationale of using Betablockers in angina pectoris.

P.T.O

13. Mention two uses & two adverse effects of Furosemide.
14. Mention three advantages of low molecular weight heparin over unfractionated heparin.
15. Rationale for use of combination of trimethoprim and sulfamethoxazole.
16. Define Patient autonomy and mention its significance.
17. Mention three uses of albendazole.
18. Mention three uses of methotrexate.
19. Mention three drugs used topically in treatment of Acne vulgaris.
20. Hydrogen peroxide is used as antiseptic. Give reason.

IV. MCQ's

10X1 = 10 Marks

- 21.
- i. Among the following compounds which one exhibits the least glucocorticoid activity.
 - a) Dexamethasone
 - b) Betamethasone
 - c) Triamcinolone
 - d) Hydrocortisone

 - ii. Absorption of oral iron preparations can be facilitated by co administering-
 - a) Ascorbic acid
 - b) Tetracyclines
 - c) Phosphates
 - d) Antacids

 - iii. Which of the following is a thrombolytic agent used to dissolve clots in acute myocardial infarction?
 - a) Clopidogrel
 - b) Alteplase
 - c) Warfarin
 - d) Apixaban

 - iv. What is the primary site of action of furosemide in the nephron.
 - a) Proximal tubule
 - b) Distal tubule
 - c) Thick ascending limb of loop of Henle
 - d) Collecting duct

 - v. Which of the following is a direct renin inhibitor?
 - a) Telmisartan
 - b) Aliskiren
 - c) Ramipril
 - d) Spironolactone

P.T.O

22.

- i. The appearance of a new infection as a result of antimicrobial therapy is known as
 - a) Superinfection
 - b) Post antibiotic effect
 - c) Drug resistance
 - d) Toxic effects

- ii. Contacts of meningococcal meningitis are treated by
 - a) Penicillin
 - b) Erythromycin
 - c) Rifampicin
 - d) Cephalosporin

- iii. Which vaccine is included in the national immunization schedule to protect against Haemophilus influenzae type b (Hib)
 - a) Pentavalent vaccine
 - b) DPT vaccine
 - c) Pneumococcal conjugate vaccine
 - d) Measles vaccine

- iv. Which of these drug acts by enhancing tubulin polymerization
 - a) Topotecan
 - b) Paclitaxel
 - c) Methotrexate
 - d) Doxorubicin

- v. The use of Folinic acid rescue is used to prevent the toxicity of which of these anti-cancer drugs?
 - a) Methotrexate
 - b) Cisplatin
 - c) Tamoxifen
 - d) Trastuzumab

80
24-10-25