B.Pharm Even Semester Examination, May, 2025

PHARMACEUTICAL SCIENCES

(6th Semester)

Course No: BP-602T

(Pharmacology-III)

FM: 75

Time: 3 Hours

The figures in the right margin indicate full marks for the question

I. A. Multiple Choice questions: 1x10=10

1. Which side effect in rifampicin warrants that it should be stopped immediately

    a) Jaundice

    b) neurotoxicity

    c) orange red colour of urine

    d) vomiting

2. Statement about albendazole is not true

    a) Poor CSF penetration

    b) Used in neurocysticercosis

    c) Combined with diethylcarbamazine

    d) Active metabolite

3. Amphotericin B toxicity is monitored by

    a) Liver function test

    b) Blood sugar

c) Serum sodium measurement

d) Serum potassium measurement

4. Azathioprine toxicity increased by

a) Anti-depressant drugs

b) Aspirin

c) Allopurinol

d) Cyclosporine

5. Methicillin resistant staphylococci do not respond to beta lactam antibiotics because

a) They produce a beta lactamase which destroys beta lactam ring

b) They elaborate amidases which destroy methicillin and related drugs

c) They have acquired penicillin binding protein which has low affinity for beta lactam antibiotics

d) They are less permeable to beta lactam antibiotics

6. Naphazoline is a

a) Short acting topical decongestant

b) Long-acting oral decongestant

c) Long-acting topical decongestant

d) Short acting oral decongestant

7. Diphenhydramine is a

a) Opioid anti tussive

6. Write few characteristics and steps for production of monoclonal antibodies.

7. What are the various steps of T-cell activation to release IL-2. Write down the MOA of calcineurin inhibitors. (3+2)

8. Differentiate between the mechanism of tissue and blood schizontocidal drugs in malaria. Write down the various treatment strategies of malaria. (2+3)

9. Describe the mechanism of action of fluoroquinolones. Differentiate the pharmacology between levofloxacin and ofloxacin. (3+2)

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4. Define protein drugs and give example.

5. What are the different genetic changesoccurring due to genotoxicity.

II Long answers (Answer two out of three questions) 10x2=20

1. Write down the mechanism of action and any two characteristics of erythromycin, doxycycline, oseltamavir, acyclovir, nevirapine. (5x2)

2. Write down the various stages of life cycle of malaria with example of suitable drugs which inhibit these stages. Explain the mechanism and pharmacology of artemisinin. (5+5)

3. Classify cytotoxic drugs used in chemotherapy of cancer. Explain the mechanism and pharmacology of alkylating and anti-metabolite drugs. (4+6)

III. Short answers (Answer seven out of nine questions) 5x7=35

1. Write down the classification of anti-asthma drugs and mechanism of action and pharmacology of any 2 class of drugs. (1+4)

2. What are the drugs used in peptic ulcer. Write down the mechanism and pharmacology of any two class of drugs. (1+4)

3. Classify anti-emetic drugs? Write down the mechanism and pharmacology of any two class of drugs. (1+4)

4. Classify anti-fungal drugs. Write down mechanism and pharmacology of any one drug. (1+4)

5. What are first line drugs of TB. Write down mechanism and pharmacology of isoniazid. (1+4)

b) Non-opioid anti tussive

c) Expectorant

d) Anti histaminic anti-tussive

8. Example of natural resistance is

a) Gonococci to sulphonamides

b) Staphylococci to penicillin

c) Gram negative bacilli to penicillin

d) Anaerobic bacilli to penicillin

9. Sulphonamide absorbed rapidly but excreted slowly is

a) Sulfisoxazole b) Sulphamethoxazole

c) Sulfasalazine d) Sulphadiazine

10. Which of the following is not the therapeutic use of penicillin G

a) Bacterial meningitis

b) Rickettsial infection

c) Syphilis

d) Tetanus

I. B Objective type 2x5=10

1. Name the various stages of life cycle of entamoeba histolytica.

2. Name the drugs used in the infestation of nematodes.

3. Name any four specific toxicities of anti- cancer drugs.