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=10)

3. Classify cytotoxic drugs used in chemotherapy of cancer. Explain the mechanism and pharmacology of any two cytotoxic drugs. (2+8=10)

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

1. Differentiate between conjugation and transduction methods of gene transfer. 5
2. What are the drugs used in peptic ulcer? Write down the mechanism and pharmacology of any two class of drugs. (1+4=5)
3. What are the drugs used in motion sickness. Write down the anti-asthma drugs and mechanism of action of any two class of drugs. (2+3=5)
4. Classify anti-fungal drugs. Write down mechanism and pharmacology of any one drug. (2+3=5)
5. What are first line drugs of TB? Write down mechanism and pharmacology of isoniazid. (1+4=5)
6. Mention the general steps of management of poisoning taking example of any one drug.
7. What are the various steps of T-cell activation to release IL-2? Write down the MOA of calcineurin inhibitors. (3+2=5)
8. Differentiate between tissue and blood schizontocidal drugs in malaria. Write down the MOA of chloroquine. (2+3=5)
9. Write down the process of carcinogenicity and mutagenicity. 5

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UG (CBCS) EVEN SEMESTER EXAM, JULY 2024

PHARMACEUTICAL SCIENCES

(6th Semester)

Course No: BP - 602T

(Pharmacology- III Theory)

Full Marks : 75

Time : 3 hours

The figures in the margin indicate full marks for the questions

I.A. Multiple choice questions - 1x10=10

1. 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
2. Following statements regarding tetracycline is true except
   a) Tetracyclines may cause Fanconi syndrome
   b) Tetracyclines effective in anthrax
   c) Doxycycline accumulates in renal tissues
   d) Demeclocycline causes phototoxicity

(Turn Over)

3. Following adverse effect are shown by the corresponding drug are true except
   a) Chloramphenicol: gray baby syndrome
   b) Cefoperazone:disulfiram like reactions
   c) Tetracycline: Fanconi syndrome
   d) Sulphonamide: red man syndrome
4. Amoxycillin is similar to ampicillin in different respects except in
   a) Antibacterial spectrum
   b) Penicillinase resistance
   c) Hypersensitivity reaction
   d) Oral absorption
5. Example of natural resistance is
   a) Gonococci to sulphonamides
   b) Staphylococci to penicillin
   c) Gram negative bacilli to penicillin
   d) Anaerobic bacilli to penicillin
6. Synergistic response is obtained by combining
   a) Penicillin G + cefazolin
   b) Cefazolin + ciprofloxacin
   c) Sulphadiazine + amoxicillin
   d) None of the above
7. Which side effect in rifampicin warrants that it should be stopped immediately
   a) Jaundice
   b) Neurotoxicity
   c) Orange red colour of urine
   d) Vomiting

8. Tetracycline with highest antileprotic activity is
   a) Demeclocycline
   b) Oxytetracycline
   c) Doxycycline
   d) Minocycline
9. Which of the following is not an initiating event in carcinogenesis?
   a) DNA adduct formation
   b) DNA strand breakage
   c) Oxidative damage of DNA
   d) Mitogenesis
10. Drug with maximum ocular side effects
   a) Ethambutol
   b) Isoniazid
   c) Rifampin
   d) Pyrazinamide

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 two specific toxicity of anti- cancer drugs.
4. Write few disadvantages of using monoclonal antibodies.
5. Give two examples of chemical carcinogens.

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

1. Write down the mechanism of action of azithromycin, doxycycline, amantadine, zidovudine, ritonavir. (5x2=10)

(Turn Over)