

(3 Hours)

Total Marks: 75

N.B.: 1. All questions are compulsory
2. Figures to right indicate full marks

Q 1. Choose the correct answer and write the correct answer.

20 M

1 Which antithyroid medication requires conversion to its active form in the body?

- a Methimazole
- b Carbimazole
- c Propylthiouracil
- d Liothyronine

2 Which class of antidiabetic drugs works by inhibiting the breakdown of incretin hormones?

- a Sulfonylureas
- b Dipeptidyl peptidase-4 (DPP-4) inhibitors
- c Thiazolidinediones
- d Thiazolidinediones

3 Which antidiabetic medication is known for its potential risk of lactic acidosis?

- a Metformin
- b Repaglinide
- c Glimepiride
- d Empagliflozin

4 Oral contraceptives work by:

- a Inhibiting ovulation
- b Increasing sperm motility
- c Preventing fertilization
- d Thickening the uterine lining

5 Corticosteroids should be tapered off gradually to prevent:

- a Adrenal insufficiency
- b Hypertension
- c Allergic reactions
- d Bone fractures

- 6 Select the 3rd generation cephalosporin that can be used only by parenteral route:
- a Cefpodoxime proxetil
 - b Ceftizoxime
 - c Ceftibuten
 - d Cefixime
- 7 The third generation cephalosporins differ from the first generation cephalosporins in that they are
- a More active against gram positive cocci
 - b More active against gram negative enterobacteriaceae
 - c Nonimmunogenic
 - d Not excreted by tubular secretion
- 8 Which of the following drugs is a derivative of nucleosides and is used for HIV infection treatment
- a Acyclovir
 - b Zidovudine
 - c Gancyclovir
 - d Trifluridine
- 9 Select the antifungal drug which is administered only by the oral route:
- a Amphotericin B
 - b Ketoconazole
 - c Griseofulvin
 - d Tolnaftate
- 10 Pyridoxine given to a patient of tuberculosis prevents
- a INH induced peripheral neuritis
 - b Rifampicin induced hepatotoxicity
 - c Ethambutol induced visual defects
 - d Streptomycin induced nephrotoxicity
- 11 Methotrexate is:
- a A purine antagonist
 - b A folic acid antagonist
 - c An antibiotic
 - d An alkylating agent

- 12 Which of the following is the fastest acting inhaled bronchodilator:
- a Ipratropium bromide
 - b Formoterol
 - c Salbutamol
 - d Salmeterol
- 13 Which of the following is the drug of choice for the treatment of extraluminal amebiasis:
- a Iodoquinol
 - b Metronidazole
 - c Diloxanide
 - d Tetracycline
- 14 Mechanism of action of cyclosporine A is:
- a Complement-mediated cytolysis of T lymphocytes
 - b ADCC towards T lymphocytes
 - c Inhibits calcineurin
 - d Compete for Fc receptors with autoantibodies
- 15 The antiemetic drug preferred in morning sickness is _____
- a Cinnarizine
 - b Meclozine
 - c Metoclopramide
 - d Dicyclomine
- 16 The _____ drug acts as ulcer insulator.
- a Sucralfate
 - b Ranitidine
 - c Misoprost
 - d Ondansetron
- 17 _____ is an antiemetic class of drug.
- a Neurokinin receptor agonist
 - b Prostaglandin antagonist
 - c Prostaglandin analogue
 - d Neurokinin receptor antagonist

- 18 Advantage of Eesomeprazole over omeprazole is _____
- a No side effects
 - b Short duration of action
 - c High oral bioavailability
 - d Faster Excretion
- 19 The _____ isozyme is abundant in cytosol.
- a Cu/Zn-SOD
 - b Mn-SOD
 - c EC-SOD
 - d Fe-SOD
- 20 The newer approach for improving the Parkinsonian symptoms is _____ .
- a Cholinomimetics
 - b Dopamine receptor antagonist
 - c Adenosine receptor antagonist
 - d COMT precursors

Q2 Answer **any Two** questions.

20 M

- 1 Classify immuno-suppressants. Discuss in detail pharmacology of calcineurin inhibitors .
- 2 Define chronopharmacology. Discuss in detail application of chronotherapy in asthma and Diabetis mellitus.
- 3 Discuss role of free radicals in etiopathology of cancer and give advances in cancer therapy on this basis.

Q3 Answer **any Five** questions.

35 M

- 1 Compare and contrast the two main classes of antithyroid drugs: Thioamides and iodides. Discuss in relation to the mechanism of actions, side effects, and considerations for use.
- 2 Elaborate on the mechanisms of action of incretin-based therapies, including glucagon-like peptide-1 (GLP-1) receptor agonists and dipeptidyl peptidase-4 (DPP-4) inhibitors. Discuss their potential side effects and their place in the treatment of type 2 diabetes.

- 3 Classify antifungal drugs. Write a note on topical imidazoles.
 - 4 Elaborate on combination therapy for tuberculosis treatment
 - 5 Discuss mechanism of action, Adverse Drug Reactions, and uses of Mast cell stabilizers and Leukotriene inhibitors
 - 6 Give detailed note on prokinetic drugs
 - 7 Enlist the endogenous antioxidant enzymes. Add detailed note on any one enzyme
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