

(3 Hours)

Total marks: 80

- N.B. (1) All questions are **compulsory**  
 (2) Figures to the right indicate full marks.

Q.1 a) Answer the following:

5

1. Stable and heritable genetic change that occurs spontaneously and randomly among microorganism is called as .....
  - a. Mutation
  - b. Natural resistance
  - c. Acquired resistance.
  - d. Cross resistance.
2. Glucocorticoids are used in the following conditions except.....
  - a. Psoriasis
  - b. Hypertension
  - c. Asthma
  - d. Arthritis
3. Radioactive iodine is indicated in \_\_\_\_\_ .
  - a. Hypothyroidism
  - b. Hyperthyroidism
  - c. Addison's disease
  - d. None of the above
4. .... is a luminal anti-amoebic drug.
  - a. diloxanide furoate
  - b. albendazole
  - c. mebendazole
  - d. neomycin
5. Anti-microbials that interfere with folate synthesis or action.
  - a. Sulphonamides
  - b. Macrolides
  - c. Beta lactam antibiotics
  - d. Quinolones.
6. The first line drugs for leprosy are \_\_\_\_\_ .
  - a. isoniazid and rifampin
  - b. dapson, rifampin and clofazimine
  - c. rifampin, pyrazinamide and streptomycin
  - d. none of the above

Q. 1 b) True or False and justify your answer: 10

1. Iron-dextran can be given by deep Intra muscular injection and slow intra venous infusion.
2. Methicillin can be used to treat penicillinase producing staphylococcal infection.
3. Retrovirus is a DNA virus.
4. Nitrofurantoin damages bacterial DNA.
5. Zidovudine is used to treat HIV infection.

Q. 1 c) Match the following:

A

1. Nitrosoureas
2. Camptothecins
3. Nitrogen mustards
4. Folate antagonists
5. Anti metabolite

B

- a. Methotrexate
- b. Melphalan
- c. Irinotecan
- d. Lomustine
- e. 5-Fluoro uracil

Q.2 a) Write notes on **any two** of the following: 8

- i) Chemotherapy of Amoebiasis.
- ii) Classification of cephalosporins and pharmacology of fourth generation cephalosporins.
- iii) Targets of anti-malarial drugs and indications, mechanism of action and adverse effects of Artesunate.

Q.2 b) Answer **any one** of the following: 4

- i) Discuss first line therapy in tuberculosis.
- ii) Use of Albendazole in treating helminth infestation.

Q.3 a) Answer **any two** of the following: 8

- i) Short note on Glucocorticoid as immunosuppressant agents.
- ii) DPP IV inhibitors in managing type 2 diabetes.
- iii) Enlist clinical uses of anti-coagulants. Discuss injectable anti-coagulants.

Q.3 b) Attempt **any one** of the following: 4

- i) Write a note on types of oral contraceptives.
- ii) Discuss the pharmacological aspects of Bisphosphonates.

Q.4 a) Answer **any two** of the following: 8

- i) Classify anti-coagulants. Discuss on direct thrombin inhibitors.
- ii) Classify anti-platelet aggregation drugs. Add a note on aspirin.
- iii) Discuss the physiological role of folic acid and its role in treatment of anaemia.

Q.4 b) Write note on **any one**: 4

- i) Tissue plasminogen Activators
- ii) Clinical uses of vitamin K

Q.5 a) Answer **any two** of the following:

8

- i) Elaborate on the anti-metabolites used in cancer therapy.
- ii) Classify antifungal drugs. Write a brief on amphotericin B.
- iii) Discuss the pharmacology of protease inhibitors in anti viral therapy.

Q.5 b) Write note on **any one**:

4

- i) Topical anti-fungal drugs
- ii) Extended spectrum penicillins

Q.6 a) Write notes on **any two** of the following:

8

- i) Classify Immunosuppressant drugs. Discuss on Calcineurin Inhibitors.
- ii) Effect of insulin on carbohydrate, fat and protein metabolism.
- iii) Discuss oxytocics.

Q.6 b) Write note on **any one**:

4

- i) Chloramphenicol
- ii) metformin

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