

(3 Hours)

Total Marks: 80

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

1. (a) Answer the following: -

16

- i) Enlist advantages of combination therapy with antimicrobials.
- ii) Explain mechanism of development of resistance to Streptomycin.
- iii) Give the clinical applications of Methotrexate.
- iv) Enlist adverse effects of Insulin therapy.
- v) Write in brief role of vitamin D in bone formation.
- vi) Explain the therapeutic applications of Immunosuppressants.
- vii) Enlist therapeutic uses of thrombolytic drugs.
- viii) Discuss mechanism of synergistic action of sulphonamide and trimethoprim.

1. (b). **Match** the followings:-

4

A**B**

- | | |
|-------------------|--------------------------------------|
| i. Tetracycline | a. DNA polymerase inhibitor |
| ii. Rosiglitazone | b. Inhibition of platelet activation |
| iii. Clopidogrel | c. Improves insulin sensitivity |
| iv. Acyclovir | d. Inhibition of protein synthesis |

2. (a) Answer **any two** of the following: -

8

- (i) Discuss chemotherapy of Leprosy.
- (ii) Explain mechanism of action, therapeutic effects and side effects of Fluroquinolones.
- (iii) Classify antiretroviral drugs. Discuss the pharmacology of Saquinavir.

2. (b) Answer **any one** of the following: -

4

- (i) Write in detail about mechanism of action and adverse effects of Sulphonamides.
- (ii) Discuss treatment for intestinal amoebiasis.

3. (a) Answer **any two** of the following: -

8

- (i) Classify oral hypoglycemic drugs. Write Mechanism of action the adverse effects and clinical uses of any one class.
- (ii) Write note on Oxytocics.
- (iii) Classify anti-thyroid agents. Write a note on radioactive Iodine.

3. (b) Write a short note on **any one** of the following: -

4

- (i) Insulin preparations.
- (ii) Bisphosphonates.

4. (a) Answer **any two** of the following: - 8
- (i) Write note on Iron preparations.
 - (ii) Compare and contrast between Low Molecular Weight and unfractionated heparin.
 - (iii) Explain mechanism of action and drug interactions of warfarin.
4. (b) Attempt **any one** of the following: - 4
- (i) Compare and contrast between Urokinase and Alteplase.
 - (ii) Classify Coagulants. Write a note on Vitamin K.
5. (a) Answer **any two** of the following: - 8
- (i) Discuss the role of antibiotics in the treatment of cancer.
 - (ii) Classify Beta lactam antibiotics. Add a note on extended spectrum Penicillins.
 - (iii) Classify antifungal drugs based on their mechanism of action. Discuss the pharmacology of Amphotericine B.
5. (b) Write a short note on **any one** of the following: - 4
- (i) Radical cure for Malaria.
 - (ii) Treatment for Filariasis.
6. (a) Answer **any two** of the following: - 8
- (i) Write a note on Glucocorticoids.
 - (ii) Classify Immunomodulators. Give mechanism of action of Tacrolimus.
 - (iii) Write a note on Oral Contraceptives.
6. (b) Answer **any one** of the following: - 4
- (i) Enlist first line drugs for treatment of Tuberculosis. Explain pharmacology of Rifampicin.
 - (ii) Write a note on Alkylating agents as anti-neoplastics.
