

Q.2 Attempt any **TWO** of the following: ($2 \times 10 = 20$)

- a) Classify antitubercular agents with representative structures, IUPAC and ADR. Discuss chemistry and SAR of three classes with suitable examples.
- b) Classify antibiotics with representative structures. Discuss MOA and SAR with suitable examples of Aminoglycoside antibiotics.
- c) Write the structure and uses of three drugs from cephalosporins and tetracycline. Discuss in detail structural activity relationship of tetracyclines.

SECTION-II

Q.3 Answer any **SEVEN** of the following: ($7 \times 5 = 35$)

- a) What are Antifungal drugs? Explain chemistry, structural activity relationship of synthetic antifungals.
- b) Define and classify antiamebic agents with suitable examples. Outline the synthesis of metronidazole.
- c) Define QSAR. Explain Hansch analysis.
- d) Explain the synergism of Trimethoprim and Sulfamethoxazole.
- e) Classify anthelmintics with their MOA and suitable examples.
- f) Discuss the structural activity relationship of sulfonamides.
- g) Write the synthesis and uses of Sulphacetamide and Mebendazole.
- h) Write a note on Pharmacophore modeling.
- i) Write a note on Macrolides.

* * * *