

- (c) Classify antifungal agents and describe drugs interfering with metabolic processes.
- (d) Enlist eicosanoids and describe chemistry of prostaglandins.
- (e) Describe drugs acting on different stages of malarial life cycle.

3 Answer the following (any **two**) **11**

- (a) Give the chemistry and SAR of tetracycline.
- (b) Enlist different physiochemical parameters used in QSAR explaining parameters from each class and highlight their importance in drug discovery process.
- (c) Describe different steps involved in viral replication with drugs acting on each stage of replication process.

SECTION II

4 Name the ring system present in the structure and mechanism of action of following drugs (any **five**) **10**

- (a) Isoniazid
- (b) Fluconazole
- (c) Methotrexate
- (d) Quinine
- (e) Ampicillin
- (f) Promethazine
- (g) Zidovudine

5 Answer the following (any **four**) **10**

- (a) Write the SAR of Cholinomimetic drugs.
- (b) Classify Quinolones and describe the mechanism of action of it.

- (c) Classify Anti-ulcer agents and explain one example from each class.
- (d) Explain the chemistry of Penicillin.
- (e) Classify antitubercular drugs and explain second line agents.
- (f) Describe the SAR of H₂ receptor antagonistic drugs.

6 Outline the synthesis and give IUPAC name of the following : (any **five**) **15**

- (a) Sulphamethoxazole
 - (b) Chloramphenicol
 - (c) Omeprazole
 - (d) Dicyclomine
 - (e) Pyridostigmine
 - (f) Chloroquine
 - (g) Ethambutol.
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