

- 1 (a) (i) Explain protein binding in relation to drug action. (5)
(ii) Explain the physicochemical properties in relation to biological activity. (9)

OR

- (b) (i) Describe the role of soft drug approach in drug design. (7)
(ii) Discuss in detail phase-II reactions involved in drug metabolism. (7)

- 2 (a) (i) What are cholinergic agents? Write the structural features necessary for a molecules to show cholinergic activity. (6)
(ii) Write the synthesis and therapeutic use of (9)
(A) Salbutamol (B) Prazocin

OR

- (b) (i) Classify Adrenergic blocking agents by giving one example for each category with structures. (6)
(ii) Write the synthesis, mechanism of action and uses of following drugs (8)
(A) Atenalol (B) Mecamylamine HCl .

- 3 (a) (i) Give the classification of anti hypertensive drugs with examples. (6)
(ii) Write the synthesis and uses of (8)
(A) Captopril (B) Clonidine

OR

- (b) (i) Classify anti hyper lipidemic agents with suitable examples. (5)
(ii) Write a note on cardiac glycosides and mechanism of action. (5)
(iii) Write the synthesis and mechanism of action of nifedipine. (4)

- 4 (a) (i) Write the general synthesis of sulfonyl ureas. Write their mechanism of action and S.A.R. (8)
(ii) Write a note on anti thyroid drugs. (6)

OR

- (b) (i) What are diuretics? Classify them with suitable examples. (6)
(ii) Write the synthesis, mechanism of action and uses of (8)
(A) Furesomide (B) Acetazolamide

- 5 (a) (i) Write a note on proton pump inhibitors. (6)
(ii) Write the synthesis, mechanism of action and uses of (8)
(A) Chlorpheniramine (b) Omeprazole

OR

- (b) (i) Classify H₁ anti histaminic drugs with one example for each class with structures. (6)
(ii) Write a short note on anti coagulant and mention the synthesis and mechanism of action of warfarin. (8)
