

FACULTY OF PHARMACY**Pharm. D (6 YDC) III-Year (Main & Backlog) Examination, July 2019****Subject : Medicinal Chemistry****Time : 3 Hrs****Max. Marks: 70****Note: Answer all questions from Part – A, answer any five questions from Part-B.**

- 1 What are preservatives? Draw the structures of any two of them.
- 2 Write the synthesis of Tolbutamide.
- 3 What is DOTS therapy ? Explain.
- 4 Explain why tetracyclines should not be taken with milk.
- 5 What is selenium distillation of steroids?
- 6 Write the difference between penicillins and cephalosporins.
- 7 Define prodrug with examples. Write any two applications.
- 8 Classify anti arrhythmic agents with examples.
- 9 Write the mechanism of action of carbonic anhydrase inhibitors.
- 10 What are antisense molecules? Give examples.

PART – B (5 x 10 = 50 Marks)

- 11 Define QSAR. Explain in detail the parameters of QSAR. (10)
- 12 (a) Classify antifungal agents with examples. (5)
(b) Write the mechanism of action of any two classes of antihyper lipidemics. (2½+2½)
- 13 (a) Give the classification of antineoplastic agents. (6)
(b) Write the SAR and mechanism of action of alkylating agents. (2+2)
- 14 (a) Classify calcium channel blockers? Write its mechanism of action and SAR. (2+2+2)
(b) Write the synthesis of (i) Verapamil (ii) Nifedipine (3+1)
- 15 (a) Write the chemistry involved in the steroidal drugs. (5)
(b) Write a short note on Oral contraceptives. (5)
- 16 (a) Write mechanism of action and SAR of : (3+3)
(i) Thiazide diuretics (ii) Thiazolidine diuretics
(b) Write a short note on thyroid drugs. (4)
- 17 Write the synthesis, mode of action of (2+3+2+3)
(a) Isosorbide dinitrate (b) Metformin (c) Warfarin (d) Dipyridamol
- 18 (a) Write a short notes on Hypoglycemic agents. (6)
(b) Write the structure and uses of (i) testosterone (ii) Progesterone (4)
