

FACULTY OF PHARMACY**Pharm. D (6 YDC) III-Year (Instant) Examination, February 2020****Subject : Medicinal Chemistry****Time : 3 Hrs****Max. Marks: 70****Note: Answer all questions from Part – A, answer any five questions from Part-B.****PART – A (10 x 2 = 20 Marks)**

- 1 What is CADD? What are its advantages?
- 2 Write the synthesis of Isoniazid.
- 3 Define Antibiotics. Write the mechanism of action of aminoglycoside antibiotics.
- 4 What are antihelminthics? Give examples.
- 5 Draw the structures of : (a) Cortisone (b) Hydrocortisone
- 6 Explain epimerization reaction in tetracyclines.
- 7 Write the degradation reactions of Penicillins.
- 8 What are Coagulants? Give the examples with structures.
- 9 Write the brand names of the following drugs.
(a) Amoxicillin + clavulanic acid (b) Cefpodoxime
- 10 Define antiseptics and disinfectants with examples.

PART – B (5 x 10 = 50 Marks)

- 11 What is combinatorial synthesis? Explain in detail the essential requirements of solid phase synthesis. (10)
- 12 (a) Give the classification of antihypertensives. (5)
(b) Write the mode of action and SAR of ACE inhibitors. (5)
- 13 Classify Antitubercular. Write the mechanism of action of each class of drugs. (5+5)
- 14 (a) Write the mechanism of action and SAR of (5)
(i) Statins (ii) Fibrates
(b) Write the Synthesis of : (5)
(i) Hydrochlorothiazide (ii) Furosemide
- 15 (a) Write the mode of action, SAR and uses of penicillin. (6)
(b) Give the synthesis of clofibrate and clonidine (4)
- 16 What is prodrug? What are the types of prodrug? Explain in detail its applications along with examples.
- 17 (a) Classify antiviral drugs with examples. (5)
(b) Write the mechanism of action of : (5)
(i) loop diuretics (ii) Thiazide diuretics
- 18 (a) Classify antianginal agents with examples. (5)
(b) Write the synthesis and mode of action (5)
(i) Ketoconazole (ii) Ethambutol
