

FACULTY OF PHARMACY
Pharm. D (6 YDC) III-Year (Main) Examination, July 2017

Subject : Medicinal Chemistry

Time : 3 Hrs

Max. Marks: 70

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

- 1 What are various parameters used in QSAR?
- 2 Give two structures of Loop diuretics.
- 3 What is the application of combinatorial chemistry?
- 4 What are diagnostic agents? Give one example with an application?
- 5 What is the action of anti-infective drugs?
- 6 Some drugs containing an ester group are inactive in vitro but once the drug is absorbed in vivo. What term is used for such a drug (i) post drug (ii) prodrug (iii) Metabolite (iv) pro-drug
- 7 Define antithrombotic.
- 8 Give popular brand names of the following drugs.
(i) Cefadroxil (ii) Tinidazole (iii) ofloxacin (iv) metformin
- 9 Sketch the structure and medicinal use of chloramphenicol.
- 10 Write the mechanism of action of anti-angina agent.

PART – B (5 x 10 = 50 Marks)

- 11 (a) Write a note on antiscabers and antipedicular agents.
(b) Write the SAR of tetracycline.
- 12 Write the synthesis, mechanism of action of the following drugs (i) cefadroxil (ii) Isomazy
(iii) ampicillin (iv) metronidazole
- 13 (a) Classify sulphonamides. Give one example with structure for each class.
(b) Write the synthesis of (i) Enalapril (ii) Mechlor ethamin
- 14 (a) Write the SAR of angiotensin - II antagonist.
(b) Write a note on antithyroid agents.
- 15 (a) Give a brief account on steroidal hormones.
(b) Write the synthesis of any two drugs belonging to the class anti-malarial.
- 16 (a) Classify diuretics with examples. Write the synthesis of acetazolamide.
(b) Write a note on macrocyclic agents.
- 17 (a) Classify antihypertensive agents and write the synthesis of any one of them.
(b) Write the synthesis of Tolbutamide and metformin.
- 18 (a) Write a note on local infective agents.
(b) Classify the pro-drug and enlist the ideal properties.
