

B. PHARM
(SEM VI) THEORY EXAMINATION 2018-19
PHARMACEUTICAL CHEMISTRY-VII (MEDICINAL CHEMISTRY-II)

*Time: 3 Hours**Total Marks: 70***Note:** 1. Attempt all Sections. If you require any missing data, choose suitably.**SECTION A**

1. **Attempt all questions in brief.** **2 x 7 = 14**
- a. Define ligand.
 - b. Give two examples of 2D descriptor.
 - c. Give mode of action and examples of class I antiarrhythmic drugs.
 - d. Draw the structure of insulin.
 - e. Write the synthesis of celecoxib
 - f. Write the mode of action and synthesis of minoxidil.
 - g. Write mode of action and examples of angiotensin converting enzyme inhibitors.

SECTION B

2. **Attempt any three of the following:** **7 x 3 = 21**
- a. What is hammet substituent constant? Explain the role of electronic parameter in QSAR.
 - b. Define and classify antianginal drugs. Discuss mode of action synthesis and uses of Isosorbide dinitrate
 - c. Write the mode of action synthesis of metformin and propylthiouracil.
 - d. Define and classify NSAID. Discuss SAR of aryl acetic acid derivatives.
 - e. Discuss in detail about cosmeceuticals. Write the synthesis of tazarotene.

SECTION C

3. **Attempt any one part of the following:** **7 x 1 = 7**
- (a) Discuss in detail about 3D QSAR methodologies.
 - (b) Discuss in detail about structure based drug design
4. **Attempt any one part of the following:** **7 x 1 = 7**
- (a) Explain in detail about calcium channel blocker.
 - (b) Explain SAR, mode of action, synthesis and uses of Lovastatin
5. **Attempt any one part of the following:** **7 x 1 = 7**
- (a) Classify hypoglycemic agents and discuss in detail about thiazolidinediones and alpha glucosidase inhibitors.
 - (b) Discuss the SAR of Chlorthiazide diuretics and write the synthesis and uses of acetazolamide.
6. **Attempt any one part of the following:** **7 x 1 = 7**
- (a) Write a note on anticoagulants.
 - (b) Discuss mode of action, synthesis and uses of paracetamol and mefenamic acid.
7. **Attempt any one part of the following:** **7 x 1 = 7**
- (a) Define and classify antihistaminic agents. Discuss the mode of action and synthesis of diphenhydramine.
 - (b) Explain proton pump inhibitor with special reference to rabeprazole.