



MCO-014-003804 Seat No. _____

M. P. M. (Sem. VIII) (CBCS) Examination

May / June - 2018

Pharmaceutical Chemistry - X

(Medicinal Chemistry - IV)

Faculty Code : 014

Subject Code : 003804

Time : 3 Hours]

[Total Marks : 80

- Instructions :** (1) Attempt three questions from each section.
(2) Questions 1 and 5 are compulsory.
(3) Figures to the right indicate full marks for the respective question.

SECTION-I

- 1** Answer the following questions : (Any **Seven**) **14**
- (1) Give structure and IUPAC name of Metoprolol.
 - (2) Explain term Lipoprotein and classify them.
 - (3) Write synthesis of Clofibrate.
 - (4) Give two examples of Calcium channel blockers with structure.
 - (5) Write synthesis of Flecainide.
 - (6) Define: Antiplatelet drugs. Give two examples of them.
 - (7) Discuss SAR of Dihydropyridines.
 - (8) Write synthesis of Isosorbidedinitrate.
 - (9) Comment: Inhibitors of HMG-CoA reductase are contraindication in pregnancy.
 - (10) Write synthesis of Warfarin.
- 2** (1) Discuss Sympatholytic antihypertensive drugs. **7**
(2) Write a note on organic nitrates. **6**

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| 3 | (1) Write mechanism of action and SAR of HMG-CoA reductase inhibitors. | 7 |
| | (2) Give detail classification of Diuratics with suitable examples. Discuss Loop diuretics in detail. | 6 |
| 4 | (1) Discuss chemistry and SAR of Cardiac glycosides. | 7 |
| | (2) Write a note on Anti-obese drugs. | 6 |

SECTION-II

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| 5 | Answer the following questions : (Any Two) | 14 |
| | (1) Sketch out the process of blood clotting schematically and discuss on the intervention part of anticoagulants. | |
| | (2) Write SAR of ACE inhibitors and synthesis of Captopril. | |
| | (3) Classify antiarrhythmic agents. Discuss mechanism of action of each class. | |
| 6 | (1) Explain in details about Immunomodulators. | 7 |
| | (2) Synthesis of (a) Amlodipine (b) Dobutamine. | 6 |
| 7 | (1) Explain SAR of Thiazide diuretics. Write down the synthesis of Hydrochlorothiazide. | 7 |
| | (2) Write a note on Plasma expanders. | 6 |
| 8 | Answer the following : | |
| | (1) Explain in detail about the Diagnostic agents. | 7 |
| | (2) Write an information note on Synthon approach. | 6 |
