



**PAJ-1612030701080300** Seat No. \_\_\_\_\_

**M. P. M. (Sem. VIII) (W.E.F. 2016) Examination**

**August - 2020**

**Pharmaceutical Chemistry - IX**

**(Medicinal Chemistry - IV)**

Time : 3 Hours]

[Total Marks : 80

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

**SECTION - I**

- |          |   |           |
|----------|---|-----------|
| <b>1</b> | Answer the following questions : (Any <b>Seven</b> )                            | <b>14</b> |
|          | (1) Write synthesis of Warfarin.  |           |
|          | (2) Synthesis of Dobutamine.  |           |
|          | (3) Write synthesis of Clofibrate.  |           |
|          | (4) Give two examples of $\text{Ca}^{+2}$ channel blockers with structure.      |           |
|          | (5) What are thrombolytic agents?   |           |
|          | (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) Give structure and IUPAC name of Metoprolol.                               |           |
| <b>2</b> | (1) Classify sympatholytic antihypertensive drugs with suitable structure.      | <b>7</b>  |
|          | (2) Write a note on Anti-anginal drugs.   | <b>6</b>  |

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

## SECTION - II

- |   |  |    |
|---|--|----|
| 5 | Answer the following questions : (Any <b>Two</b> )   | 14 |
|   | (1) Write a note on Plasma expanders.  |    |
|   | (2) Write SAR of ACE inhibitors and synthesis of Captopril.  |    |
|   | (3) Classify anti-arryhythmic agents. Discuss mechanism of action of each class.                                   |    |
| 6 | (1) Explain in details about Immunomodulators.   | 7  |
|   | (2) Write a note on anti-platelet agents.  | 6  |
| 7 | (1) Explain SAR of Thiazide diuretics and 5-sulfamoyl benzoic acid derivatives.                                    | 7  |
|   | (2) Sketch out the process of blood clotting schematically and discuss on the intervention part of anticoagulants. | 6  |
| 8 | Answer the following :   |    |
|   | (1) Explain in detail about the Diagnostic agents.   | 7  |
|   | (2) Write an information note on Synthon approach.   | 6  |

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