



**PPB-161201701050300** Seat No. \_\_\_\_\_

**M. P. M. (Sem. V) (CBCS) Examination**

**November / December - 2018**

**Pharmaceutical Chemistry - VI**

*(Medicinal Chemistry - I)*

Time : 3 Hours]

[Total Marks : 80

- Instructions :**
- (1) Attempt three questions from each section.
  - (2) Question no. 1 and 5 are compulsory.
  - (3) Figures to the right indicate full marks for the respective question.

**SECTION - I**

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|----------|--|-----------|
| <b>1</b> | Explain the following terms : (any <b>seven</b> )          | <b>14</b> |
|          | (1) Geometrical isomerism                                  |           |
|          | (2) Mucolytics   |           |
|          | (3) Acute bronchitis                                       |           |
|          | (4) Antacids   |           |
|          | (5) Prokinetics  |           |
|          | (6) Anti-diarrheals  |           |
|          | (7) Irritable bowel syndrome                               |           |
|          | (8) Expectorant  |           |
|          | (9) Anti-emetics   |           |
|          | (10) Laxative  |           |
| <b>2</b> | (a) Write an informative note on cholinergic agents.       | <b>7</b>  |
|          | Explain the SAR of Parasympathomimetics.                   |           |
|          | (b) Write the starting materials and detail synthesis of   | <b>6</b>  |
|          | Omeprazole and Ranitidine with IUPAC name.                 |           |
| <b>3</b> | (1) Explain in details about the theories of receptors.    | <b>7</b>  |
|          | (2) Write a short note on Eicosanoids.                     | <b>6</b>  |
| <b>4</b> | (1) Enumerate the physicochemical properties affecting     | <b>7</b>  |
|          | biological activity. Explain Hydrogen bonding properties,  |           |
|          | Partition coefficient, Protein binding and Redox potential |           |
|          | in detail.   |           |
|          | (2) Classify the drugs which block the interaction of      | <b>6</b>  |
|          | noradrenaline with receptor.                               |           |

## SECTION - II

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|----------|---|-----------|
| <b>5</b> | Answer the following questions : (any <b>two</b> )  | <b>14</b> |
|          | (1) Define adrenergic agents. Classify them with examples.  |           |
|          | (2) Explain PPIs in detail with their mechanism of action.  |           |
|          | (3) Write a note on Eicosanoids Approved for Human Clinical use.                                  |           |
| <b>6</b> | (1) How conformers affect biological activity ? Classify and explain Bio-isosterism with example. | <b>7</b>  |
|          | (2) Write a note on Ganglionic blockers.  | <b>6</b>  |
| <b>7</b> | (1) What is Asthma ? Explain Anti-asthmatic drugs in detail.                                      | <b>7</b>  |
|          | (2) Define Medicinal Chemistry with its importance in drug discovery.                             | <b>6</b>  |
| <b>8</b> | (1) Enlist various histaminic receptors. Discuss neurochemistry of histamine.                     | <b>7</b>  |
|          | (2) Outline synthesis and uses of Cetrizine.  | <b>6</b>  |
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