



**PPB-014-003705**

Seat No. \_\_\_\_\_

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

**November / December - 2018**

**Pharmaceutical Chemistry - IX**

*(Medicinal Chemistry - III)*

**Faculty Code : 014**

**Subject Code : 003705**

Time : 3 Hours]

[Total Marks : 80

- Instructions :**
- (1) Attempt three questions from each section.
  - (2) Question 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) Justify: Supplement of Vit. B6 should be given with INH in T.B.
- (2) Give stereochemistry of penicillin.
- (3) Give structure and mechanism of action of antibiotic whose side effect is gray baby syndrome.
- (4) Explain life cycle of malarial parasite.
- (5) Match 'A' with 'B'.

**A**

Streptomycin

Neomycin

Chloramphenicol

Cephalosporin

**B**

*Cephalosporium acremonium*

*Streptomyces griseus*

*Streptomyces fradiae*

*Streptomyces aureofaciens*

- (6) Explain SAR of antibiotic which contain aminosugars which are linked to aminocyclitol ring.
- (7) Give causative agent for Malaria. Which species is most dangerous? Why?
- (8) Give examples of DNA and RNA Viruses. Name the virus for chicken pox, conjunctivitis and rabies.
- (9) Justify: Slow acetylators are more prone to INH toxicity than rapid acetylators.
- (10) Explain the term CADD.

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| <b>2</b> | (1) Write the mechanism of action of $\beta$ -lactam antibiotic. <span style="float: right;"><b>7</b></span><br>Explain SAR of Penicillin.<br>(2) What is "Free Wilson Mathematical model of QSAR" ? <span style="float: right;"><b>6</b></span><br>Give application of QSAR in drug design. |
| <b>3</b> | (1) Explain SAR of antibiotic which is not taken with <span style="float: right;"><b>7</b></span><br>milk.<br>(2) Explain in detail SAR of cephalosporin and <span style="float: right;"><b>6</b></span><br>sulphonamides.   |
| <b>4</b> | (1) Give method of synthesis and uses of Ketoconazole <span style="float: right;"><b>7</b></span><br>and chlorambucil.<br>(2) Classify sulphonamides with suitable examples and <span style="float: right;"><b>6</b></span><br>explain its mechanism of action.                              |

## SECTION – II

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| <b>5</b> | Answer the following questions : (any <b>two</b> ) <span style="float: right;"><b>14</b></span><br>(1) Explain the term $\beta$ -lactam antibiotics. Classify <span style="float: right;"><b>7</b></span><br>cephalosporin antibiotic with suitable examples.<br>(2) What are anti-viral agents? Classify with suitable <span style="float: right;"><b>6</b></span><br>examples.<br>(3) Explain SAR of fluoroquinolones and give synthesis of <span style="float: right;"><b>6</b></span><br>sulphacetamide. |
| <b>6</b> | (1) Write an informative note on agents used to treat <span style="float: right;"><b>7</b></span><br>mycosis.<br>(2) Write a note on anthelmintic agents and give <span style="float: right;"><b>6</b></span><br>synthesis of albendazole.   |
| <b>7</b> | (1) Classify anti -mycobacterial agents. Write a note <span style="float: right;"><b>7</b></span><br>on anti-TB.<br>(2) Classify anti-cancer agents. <span style="float: right;"><b>6</b></span>   |
| <b>8</b> | Answer the following :<br>(1) What is QSAR ? Write a note on combinatorial <span style="float: right;"><b>7</b></span><br>chemistry and parallel synthesis.<br>(2) Give SAR of Quinolines. <span style="float: right;"><b>6</b></span>   |