



JAJ-014-003705

Seat No. _____

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

November - 2019

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) Questions 1 and 5 are compulsory.
 - (3) Figure to the right indicates full marks for the respective question.

SECTION - I

- 1** Answer the following questions : (any **seven**) **14**
- (1) Give synthesis of ketoconazole.
 - (2) Comment: Glucocorticoid is added in anti-leprotic drug regimen.
 - (3) Name the virus for smallpox, rabies, influenza and chickenpox.
 - (4) Explain life cycle of malarial parasite.
 - (5) Gentamycin, neomycin streptomycin and chloramphenicol were isolated from which organism ?
 - (6) Comment: Supplement of Vit. B6 should be given with INH in T.B.
 - (7) What is QSAR ?
 - (8) Explain SAR of macrolide antibiotic.
 - (9) Comment: Slow acetylators are more prone to INH toxicity than rapid acetylators.
 - (10) Give structure and mechanism of action of Chloramphenicol.
- 2** (1) Classify anti-neoplastic agents. **7**
- (2) Give SAR of cephalosporin and sulphonamides. **6**

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| 3 | (1) Write a note on anthelmintic agents and give synthesis of albendazole. | 7 |
| | (2) Explain SAR of fluoroquinolones and give synthesis of ofloxacin. | 6 |
| 4 | (1) "Free Wilson Mathematical model of QSAR" and give application of QSAR in drug design. | 7 |
| | (2) Write a note on De novo Drug Design. | 6 |

SECTION - II

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| 5 | Answer the following questions : (any two) | 14 |
| | (1) Write a note on agents used for mycotic medications. | |
| | (2) Give classification and mechanism of action of drugs which are used to treat infection caused by Mycobacterium tuberculosis. | |
| | (3) Explain about methods of Lead Discovery. | |
| 6 | (1) Write SAR drugs used as antiprotozoal agents. | 7 |
| | (2) Give method of synthesis and uses of Methotrexate and Clotrimazole. | 6 |
| 7 | (1) Give SAR of tetracyclines. | 7 |
| | (2) Classify sulphonamides with suitable examples and explain its mechanism of action. | 6 |
| 8 | Answer the following : | |
| | (1) Explain mechanism of action of β -lactam antibiotic. Explain SAR of Penicillin. | 7 |
| | (2) Define and classify anti-viral agents with suitable examples. | 6 |