

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm - SEMESTER-VI • EXAMINATION – WINTER -2021

Subject Code: BP601TP**Date:23/11/2021****Subject Name: Medicinal Chemistry III****Time:02:30PM to 05:30PM****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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| Q.1 | (a) | Discuss mode of action, therapeutic uses and chemical degradation of Tetracycline. | 06 |
| | (b) | Write down SAR of Cephalosporin anti-biotic. | 05 |
| | (c) | Write a note of Aminoglycosides. | 05 |
| Q.2 | (a) | Define Prodrugs. Discuss basic concepts and application of prodrugs design. | 06 |
| | (b) | Write down SAR of quinolines. Write down synthesis of Chloroquine. | 05 |
| | (c) | Write down mechanism of action, therapeutic uses and synthesis of Chloramphenicol. | 05 |
| Q.3 | (a) | Classification of Anti-tubercular agents. Discuss about DOTS therapy in Tuberculosis. | 06 |
| | (b) | Write down SAR of quinolones. | 05 |
| | (c) | Write a note on drugs used for the treatment of HIV. Discuss synthesis of Acyclovir. | 05 |
| Q.4 | (a) | Write about SAR and classification of Sulfonamides. | 06 |
| | (b) | Define QSAR. Discuss about Hansch QSAR Models in details. | 05 |
| | (c) | Write about pharmacophore modeling in drug design. | 05 |
| Q.5 | (a) | Classify antifungal agents. Write down mode of action and therapeutic use of azole class of antifungal agents. | 06 |
| | (b) | Write down synthesis, mode of action and uses of Dapsone. | 05 |
| | (c) | Write a note of Macrolide anti-biotic. | 05 |
| Q.6 | (a) | Define combinatorial chemistry. Discuss concepts and application of combinatorial chemistry. | 06 |
| | (b) | Write a note on Anthelmintics. Write down synthesis of Mebendazole. | 05 |
| | (c) | Write about etiology of malaria. | 05 |
| Q.7 | (a) | Discuss various approaches used in drug design. | 06 |
| | (b) | Write a note on anti-protozoal agents. Discuss synthesis of Metronidazole. | 05 |
| | (c) | Write about molecular docking techniques. | 05 |
