

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.

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
