Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.PHARM.-SEMESTER–VII- EXAMINATION –SUMMER-2017

Subject Code: 270003 **Date: 03/05/2017**

Subject Name: Pharmaceutivcal Chemistry IX (Medicinal Chemistry)

Time: 02:30 PM to 05:30 PM **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)	Give structure of insulin. Write synthesis of Glipizide and Metformin.	06
	(b)	Describe mechanism of working of combination pill contraceptives and write in short about ovulation inducers.	05
	(c)	Give SAR of Adrenocorticoids.	05
Q.2	(a)	Classify oral antidiabetic agents and explain one example from each class.	06
	(b)	Classify anti-thyroids giving mechanism of action.	05
	(c)	What are anabolic steroids? Describe how androgens can be made selectively anabolic.	05
Q.3	(a)	Give classification and mechanism of action of antiviral agents.	06
	(b)	Classify anti-amoebic agents and explain one drug from each class.	05
	(c)	Explain antimetabolites as anticancer agents.	05
Q.4	(a)	Classify antineoplastic agents and give mechanism of action of each class.	06
	(b)	Describe drugs used as anti-HIV agents	05
	(c)	Write SAR of quinolines as antimalarial agent and give synthesis of primaquine.	05
Q.5	(a)	Write SAR of Tetracyclines and Fluoroquinolones	06
	(b)	Describe drugs acting on different stages of malarial life cycle	05
	(c)	Explain chemical degradation of penicillins with special emphasis on importance of pH.	05
Q. 6	(a)	Write classification, mechanism of action of antimycobacterial agent. Give synthesis of Isoniazid.	06
	(b)	Classify antifungal agents and explain ergosterol synthesis inhibitor drugs	05
	(c)	Give classification and mechanism of action of Anthelmintics.	05
Q. 7	(a)	Write synthesis of (Any Three) 1) Ciprofloxacin 2) Chloramphenicol 3) Clofazimine 4) Methotrexate 5) Albendazole	06
	(b)	Explain SAR and mechanism of action of aminoglycoside antibiotics.	05
	(c)	Write classification, mechanism of action of sulphonamides and give synthesis of sulphamethoxazole	05

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