Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.PHARM – SEMESTER – VIII • EXAMINATION – WINTER – 2015

Subject Code: 280003 **Date: 09/12/2015**

Subject Name: Pharmaceutical Chemistry X (Medicinal Chemistry)

Time: 2.30 PM to 5.30 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)**	Discuss SAR of cardiac glycosides and write synthesis of dobutamine.	**06**
	(b)	Define and classify antihypertensive agents with suitable examples and structure in each category.	**05**
	(c)	Write a note on antianginal agents.	**05**
Q.2	**(a)**	Define and classify diuretics with suitable examples. Discuss potassium sparing diuretics.	**06**
	(b)	Write a note on thiazide diuretics including its SAR.	**05**
	(c)	Write down synthesis of furosemide and acetazolamide.	**05**
Q.3	**(a)**	Enumerate different methods used in QSAR & discuss any one of them.	**06**
	(b)	Write a brief note on combinatorial synthesis.	**05**
	(c)	Discuss about lead optimization.	**05**
Q.4	**(a)**	Classify antihyperlipidemic agents with suitable examples and structure in each category.	**06**
	(b)	Discuss SAR of HMG coA reductase inhibitors and write the synthesis of clofibrate.	**05**
	(c)	Discuss various antiplatelet agents in detail.	**05**
Q.5	**(a)**	Write a note on antiobesity agents.	**06**
	(b)	Discuss SAR of angiotensin convertase inhibitors.	**05**
	(c)	Write down synthesis of nifedipine and lignocaine.	**05**
Q. 6	**(a)**	Discuss various QSAR parameters in detail.	**06**
	(b)	Write a note on calcium channel blockers as antihypertensive agent.	**05**
	(c)	Write synthesis of isosorbide dinitrate and captopril.	**05**
Q.7	**(a)**	Write a note on CADD.	**06**
	(b)	Write a note on thrombolytic agents.	**05**
	(c)	Write synthesis of atenolol and warfarin.	**05**

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