Seat No.: _____ Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm – SEMESTER VIII – • EXAMINATION – WINTER - 2016

Subject Code: 280003 **Date: 24/11/2016**

Subject Name: Pharmaceutical Chemistry-X (Medical 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)**	Classify Antihypertensive agents. Give synthesis of Hydralazine.	**06**
	(b)	Give SAR of Cardiac Glycosides.	**05**
	(c)	Give synthesis of Nifedipine and Lignocaine.	**05**
Q.2	**(a)**	Explain Free Wilson Analysis, its advantages and disadvantages.	**06**
	(b)	Give SAR of Thiazide diuretics.	**05**
	(c)	Write a note on heparin as anticoagulant.	**05**
Q.3	**(a)**	Classify Antihyper-lipidemics agents giving its mechanism, of action.	**06**
	(b)	Write a note on Thrombolytic agents.	**05**
	(c)	Give synthesis of Warfarin and Captopril.	**05**
Q.4	**(a)**	Classify Diuretics with its structure. Write mechanism of action of potassium sparing diuretics.	**06**
	(b)	Write in brief about Computer Assisted Drug Design.	**05**
	(c)	Give synthesis of Furosemide and Ethacrinic acid.	**05**
Q.5	**(a)**	Write a note on Hansch Linear Free Energy relationship (LFER) model in QSAR studies.	**06**
	(b)	Write a note on Antianginal agents.	**05**
	(c)	Write a note on HTS (High Throughput Screening)	**05**
Q. 6	**(a)**	Write short notes on sodium channel blockers as antiarrhythmic agents.	**06**
	(b)	Write a note on lead optimization.	**05**
	(c)	Write a note on Antiobesity drugs.	**05**
Q.7	**(a)**	Give SAR of HMGCOA – reductase inhibitors. Synthesis of Clofibrate.	**06**
	(b)	Write a note on Molecular Modeling.	**05**
	(c)	Write a short notes on Plasma expanders.	**05**

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