

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.

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|-------------|-----|--|-----------|
| 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 Anti-hyper-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 |
