

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

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| 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 |
