

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.Pharm – SEMESTER – VI - EXAMINATION – SUMMER - 2017**

**Subject Code: 2260004**

**Date: 05/05/2017**

**Subject Name: Pharmaceutical Chemistry –VIII (Medicinal Chemistry - II)**

**Time: 10.30 am to 01.30 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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|-------------|--|-----------|
| <b>Q.1</b>  | (a) Explain Occupational theory and Induced fit theory of receptor in detail.  | <b>06</b> |
|             | (b) Write a brief note on factors affecting drug- receptor interaction.  | <b>05</b> |
|             | (c) Define Xenobiotics. Give importance of CYP-450 in drug metabolism.   | <b>05</b> |
| <b>Q.2</b>  | (a) Enlist different pathways of drug metabolism. Describe any two conjugation reaction in drug metabolism giving specific examples. | <b>06</b> |
|             | (b) Explain factors affecting drug metabolism in brief.  | <b>05</b> |
|             | (c) Define and classify CNS stimulants. Write a note on analeptics.  | <b>05</b> |
| <b>Q.3</b>  | (a) Define Insomnia. Explain mechanism and structure activity relationship of Barbiturates derivatives.                              | <b>06</b> |
|             | (b) Explain Structure activity relationship and mode of action of Tricyclic antidepressants.   | <b>05</b> |
|             | (c) Write a note on hallucinogens.   | <b>05</b> |
| <b>Q.4</b>  | (a) Classify the drugs used in epilepsy in detail. Give synthesis of Phenytoin.  | <b>06</b> |
|             | (b) Define Anxiety. Write a note on Anxiolytic drugs.  | <b>05</b> |
|             | (c) Give synthesis of L-Dopa and Chlordiazepoxide.   | <b>05</b> |
| <b>Q.5</b>  | (a) Define and classify local anesthetics. Explain the SAR of benzoic acid derivatives in detail.                                    | <b>06</b> |
|             | (b) What is Alzheimer's disease? Write note on drugs used in Alzheimer's disease.  | <b>05</b> |
|             | (c) Give synthesis and uses of Thiopental sodium and Fluoxetine.   | <b>05</b> |
| <b>Q. 6</b> | (a) What is Psychoses? Give chemical classification of Antipsychotics and discuss the SAR of phenothiazine.                          | <b>06</b> |
|             | (b) What is Parkinsons disease? Write a note on antiparkinson's agents.  | <b>05</b> |
|             | (c) Explain stages of anesthesia with classification of Inhalation anesthetics.  | <b>05</b> |
| <b>Q.7</b>  | (a) What are NSAIDS? Give chemical classification of NSAIDS in detail.   | <b>06</b> |
|             | (b) Write a brief note on antigout agents.   | <b>05</b> |
|             | (c) Give synthesis of Diclofenac, Ibuprofen and Aspirin.   | <b>05</b> |

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