

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 6 EXAMINATION – SUMMER -2019**Subject Code: 260004****Date: 14-05-2019****Subject Name: Pharmaceutical Chemistry - VIII (Medicinal 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) | Give structure and use of the following.
1) Amitryptiline 2) Indomethacin 3) Morphine 4) Diclofenac
5) Carbamazepine 6) Mefenamic acid | 06 |
| | (b) | Write structural difference between amphetamine and ephedrine and synthesis of any one. | 05 |
| | (c) | Why the enzyme Cytochrome called P-450? Explain catalytic reaction cycle involving it. | 05 |
| Q.2 | (a) | Explain different theories of receptors. | 06 |
| | (b) | Explain factors affecting drug metabolism. | 05 |
| | (c) | Give the synthesis of following drugs:
(i) Procaine (ii) Salbutamol | 05 |
| Q.3 | (a) | Define and classify cholinergic agents. What are cholinesterase inhibitors? How do they act? Give examples. | 06 |
| | (b) | Write synthesis of thiopental sodium with mode of action. | 05 |
| | (c) | What is myasthenia gravis? Write the structures of the drugs used in the treatment of myasthenia gravis. | 05 |
| Q.4 | (a) | What are Sedative and Hypnotics. Classify them in detail. | 06 |
| | (b) | What is Anaesthesia? Write note on General Anaesthetic agents. | 05 |
| | (c) | Discuss in detail Cognition enhancers. | 05 |
| Q.5 | (a) | What is xenobiotics? Describe Phase-I of Xenobiotic metabolism. | 06 |
| | (b) | Classify Local Anesthetics in detail. | 05 |
| | (c) | What do you mean by hallucination ? Write a note on hallucinogens. | 05 |
| Q. 6 | (a) | Define and classify antiepileptic drugs. Discuss SAR of Benzodiazepines. | 06 |
| | (b) | Write SAR of barbiturates. | 05 |
| | (c) | Write a detail note on Antiparkinson's agents. | 05 |
| Q.7 | (a) | Classify antidepressants. Describe in detail about MOA, SAR & therapeutic uses of MAO inhibitors. | 06 |
| | (b) | What is schizophrenia? Explain SAR of Phenothiazine derivatives as CNS depressants. | 05 |
| | (c) | Discuss drugs used in treatment of gout. Give synthesis of allopurinol. | 05 |
