

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 6 EXAMINATION – SUMMER -2019

Subject Code: 2260004

Date: 14-05-2019

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

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) | Enlist theories of Dug-Receptor interactions. Describe any three as per your knowledge. | 06 |
| | (b) | Discuss on factors affecting Dug-Receptor interactions. | 05 |
| | (c) | Explain microsomal oxidation catalyzed by CYP450 including CYP450 cycle. | 05 |
| Q.2 | (a) | Define drug metabolism. What do you mean by phase-I reactions? Enlist phase-I reactions and explain oxidation reaction in detail. | 06 |
| | (b) | Discuss factors affecting drug metabolism. | 05 |
| | (c) | Give SAR of phenothiazines. | 05 |
| Q.3 | (a) | Give synthesis and use of: (Any three)
i). Phenytoin ii). Thiopental iii). Halothane iv). Chlorpromazine. | 06 |
| | (b) | Define general anesthetics. Discuss stages of anesthesia in detail. | 05 |
| | (c) | Define and classify antidepressant agents with at least three drug examples and one structure of each category. | 05 |
| Q.4 | (a) | Define and classify antiepileptic agents with at least three drug examples and one structure of each category. | 06 |
| | (b) | Give SAR of benzodiazepines. | 05 |
| | (c) | Write a short note on Analeptics. | 05 |
| Q.5 | (a) | Give synthesis and use of: (Any three)
i). Paracetamol ii). Aspirin iii). Diclofenac iv). Indomethacin. | 06 |
| | (b) | Give synthesis, IUPAC name and use of Imipramine OR Carbamazepine. | 05 |
| | (c) | Give an informative note on Cognition enhancers. | 05 |
| Q. 6 | (a) | Give SAR of benzoic acid and aniline derivatives with local anesthetic activity. | 06 |
| | (b) | Share your knowledge in detail on DMARDs. | 05 |
| | (c) | Give structure of: (Any five)
i). Amphetamine ii). Allopurinol iii). Ibuprofen iv). L-dopa v). Naproxen vi). Fluoxetine. | 05 |
| Q.7 | (a) | Write a short note on antiparkinson agents. | 06 |
| | (b) | Define and classify sedative and hypnotics with at least three drug examples and one structure of each category. | 05 |
| | (c) | Give an informative note on drugs for the Alzheimer's disease. | 05 |
