

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm- SEMESTER IV EXAMINATION – SUMMER - 2018

Subject Code:2240005

Date: 14/05/2018

Subject Name: Basic Concepts of Pharmacology and Clinical Pharmacy Practice

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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|-------------|-----|--|-----------|
| Q.1 | (a) | Classify various routes of administration. Write merits and demerits of intravenous route. | 06 |
| | (b) | Explain dose response relationship. | 05 |
| | (c) | Define volume of distribution and explain factors affecting drug distribution. | 05 |
| Q.2 | (a) | Write in detail on G-protein coupled receptors. | 06 |
| | (b) | Explain various sources of drugs. | 05 |
| | (c) | Differentiate competitive and non-competitive antagonism. | 05 |
| Q.3 | (a) | Define pharmacokinetics and explain factors affecting drug absorption. | 06 |
| | (b) | Write a note on Plasma protein binding. | 05 |
| | (c) | Explain following terms: | 05 |
| | | (1) Bioavailability | |
| | | (2) Receptor | |
| | | (3) Agonist | |
| | | (4) Clinical Pharmacy | |
| | | (5) Pharmacoepidemiology | |
| Q.4 | (a) | Write a note on Kinase linked receptors. | 06 |
| | (b) | Write a note on medication errors. | 05 |
| | (c) | Discuss pharmacokinetic drug interaction with suitable examples. | 05 |
| Q.5 | (a) | Explain in details on transportation mechanisms of drug across biological membrane. | 06 |
| | (b) | Write a note on adverse drug reaction. | 05 |
| | (c) | Define the following: | 05 |
| | | (1) Synergism | |
| | | (2) Potentiation | |
| | | (3) Drug tolerance | |
| | | (4) Half life | |
| | | (5) Pharmacogenetics | |
| Q. 6 | (a) | Define biotransformation. Explain mixed function oxidase system for drug metabolism. | 06 |
| | (b) | Discuss about pharmacokinetic changes in drug therapy in elderly patients. | 05 |
| | (c) | Write a short not on Blood brain barrier. | 05 |
| Q.7 | (a) | Write a note on Therapeutic drug monitoring and its significance. | 06 |
| | (b) | Describe communication skills for patient counseling. | 05 |
| | (c) | Explain in brief the rationale use of drug. | 05 |
