

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER-4 EXAMINATION – WINTER -2024

Subject Code:BP404TP**Date: 26-12-2024****Subject Name: Pharmacology I****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) Define general anaesthesia. Write various phases of the general anaesthesia. | 06 |
| | (b) Classify receptors. Discuss signal transduction pathway of the nuclear receptor. | 05 |
| | (c) Explain various phases of the clinical trial. | 05 |
| Q.2 | (a) Define adverse drug reaction. Explain Rawlins–Thompson classification of adverse drug reaction. | 06 |
| | (b) Enlist routes of drug administration. Write merits and demerits of parenteral route. | 05 |
| | (c) Write a note on myasthenia gravis. | 05 |
| Q.3 | (a) Define drug absorption. Discuss various mechanisms of the drug transport across the membrane. | 06 |
| | (b) Classify anticholinesterases. Write therapeutic uses of the anticholinesterases. | 05 |
| | (c) Write a note on neuromuscular blocking agents. | 05 |
| Q.4 | (a) Classify sympathomimetic. Write pharmacological actions of the adrenaline. | 06 |
| | (b) Define opioid analgesic. Write pharmacological actions of the morphine. | 05 |
| | (c) Justify the comments:
a) Lithium carbonate can be used as mood stabilizer.
b) Levodopa is used in combination with carbidopa. | 05 |
| Q.5 | (a) Discuss physiological and pathological role of the serotonin. | 06 |
| | (b) Classify the anti-epileptic drugs. Write pharmacology of the phenytoin. | 05 |
| | (c) Explain microsomal enzyme induction and inhibition with suitable examples. | 05 |
| Q. 6 | (a) Define drug-drug interaction. Explain pharmacokinetics drug-drug interaction with suitable examples. | 06 |
| | (b) Classify anti-depressant drugs. Write pharmacology of the SSRI. | 05 |
| | (c) Write a note on neurohumoral transmission. | 05 |
| Q.7 | (a) Explain the following terms;
a) Drug addiction, b) Drug abuse, c) Drug tolerance | 06 |
| | (b) Classify local anaesthetic agents. Write mechanism of action and adverse effects of Lidocaine. | 05 |
| | (c) Define antagonism. Explain different types of antagonism with suitable examples. | 05 |
