

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM – SEMESTER IV • EXAMINATION – SUMMER -2020

Subject Code: BP404TP**Date: 29-10-2020****Subject Name: PHARMACOLOGY- I****Time: 10:30 AM TO 1:30 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 different types of receptors and discuss G protein coupled receptors in detail. | 06 |
| | b) Classify Parasympathomimetic agents and write a note on organophosphate poisoning. | 05 |
| | c) Discuss the factors modifying drug action in detail. | 05 |
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| Q.2 | a) Enlist the factors affecting drug absorption. Explain how lipid solubility and ionization of drug affects its absorption. | 06 |
| | b) Classify General Anaesthetics. Discuss the stages of general anaesthesia with suitable diagram. | 05 |
| | c) Discuss types of Glaucoma, pathophysiology and its drug treatment. | 05 |
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| Q.3 | a) Differentiate between Phase I and Phase II biotransformation reaction. | 06 |
| | b) Enlist various routes of drug administration and discuss advantages and disadvantages of Oral route. | 05 |
| | c) Write a note on Neurohumoral transmission. | 05 |
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| Q.4 | a) Classify Local anaesthetics and write a detailed pharmacology of procaine. | 06 |
| | b) Define the following terms:
i) Tolerance ii) Loading dose iii) Inverse agonist iv) Competitive antagonism v) Enzyme induction. | 05 |
| | c) Write on role of GABA as a neurotransmitter in CNS. | 05 |
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| Q.5 | a) Classify drug interactions and discuss pharmacokinetic drug interactions with suitable examples. | 06 |
| | b) Discuss Mechanism of action and pharmacological actions of Adrenaline. | 05 |
| | c) Explain the pharmacology of β - Blockers in detail. | 05 |
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| Q. 6 | a) Classify Skeletal muscle relaxants. Explain mechanism of action and pharmacology of d- tubocurarine. | 06 |
| | b) Discuss the rationale for the use of ethyl alcohol in methyl alcohol poisoning. | 05 |
| | c) Classify antiepileptic drugs and write MOA and adverse effect of Phenytoin. | 05 |
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| Q.7 | a) Classify drugs used in Parkinsonism. Explain why Carbidopa is used in combination with Levodopa. | 06 |
| | b) Classify antipsychotic agent and write a note on atypical antipsychotic agents. | 05 |
| | c) Differentiate between REM and NREM sleep. Explain the mechanism of actions, pharmacological actions, adverse effects and use of benzodiazepines. | 05 |