

Seat No.: _____

Enrolment No. _____

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.

- 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**
- 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**
- 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**
- 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**
- 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**
- 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**
- 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**
