

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**PHARM.D YEAR-2 EXAMINATION – WINTER - 2024**

**Subject Code: 828804****Date: 10-12-2024****Subject Name: Pharmacology-I****Time: 02 : 30 PM TO 5 : 30 PM****Total Marks: 70****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Define receptors. Classify them and explain mechanism of nuclear receptors. **06**  
(b) Define anesthesia. Classify anesthetic agents stating their advantages and disadvantages. **04**  
(c) Describe mechanism of action and therapeutic uses of - **04**  
i) Propranolol ii) Digitalis
- Q.2** (a) Classify parasympatholytics .Detail therapeutic uses of atropine. **06**  
(b) Discuss pharmacological actions of alcohol. **04**  
(c) Describe mechanism of action and therapeutic uses of - **04**  
i) Lignocaine ii) Amphetamine
- Q.3** (a) Discuss process of drug absorption. **06**  
(b) Classify antihypertensive agents. Discuss mechanism of action of centrally acting antihypertensive agents. **04**  
(c) Classify anticonvulsants and state their mechanism of action. **04**
- Q.4** (a) Give mechanism of action and therapeutic uses of- **06**  
a) L-dopa b) Selegiline c) Diazepam.  
(b) Detail mechanism of action and pharmacological actions of morphine. **04**  
(c) Explain the terms i) Expectorants ii) Anti-tussives. **04**
- Q.5** (a) Give mechanism of action and side effects of the following- **06**  
a) Clozapine b) Phenytoin c) Chlorpromazine .  
(b) Give synthesis, metabolism and pharmacological actions of thyroid hormones. **04**  
(c) Give mechanism of action and therapeutic uses of i) Atorvastatin ii) Clofibrate **04**
- Q. 6** (a) Discuss mechanism of action and pharmacological actions of insulin **06**  
(b) Classify CNS stimulants. Explain mechanism of action and pharmacological actions of strychnine. **04**  
(c) Explain the mechanisms: i) Ethyl alcohol is given to treat methyl alcohol toxicity ii) MAO inhibitors should not be taken with tyramine rich food. **04**
- Q.7** (a) Explain different routes of drug administration. **06**  
(b) Classify histamine antagonists and state their therapeutic uses. **04**  
(c) Classify different oral contraceptives detailing their mechanism of action. **04**