

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Pharm D – 2<sup>nd</sup> Year • EXAMINATION – SUMMER - 2022**

**Subject Code: 828804****Date:07/06/2022****Subject Name: Pharmacology-I****Time: 10:30am to 01:30pm****Total Marks: 70****Instructions:**

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

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|-------------|-----|---|-----------|
| <b>Q.1</b>  | (a) | Define drug-drug interaction. Discuss pharmacokinetic drug-drug interaction with examples.          | <b>06</b> |
|             | (b) | Classify neuromuscular blocking agents. Write pharmacology of depolarizing blockers.                | <b>04</b> |
|             | (c) | Enumerate antiarrhythmic drugs according to effect on action potential.                             | <b>04</b> |
| <b>Q.2</b>  | (a) | Describe mechanism of action, adverse drug reactions and therapeutic uses of aminophylline.         | <b>06</b> |
|             | (b) | Discuss preanesthetic medicines with their significance.  | <b>04</b> |
|             | (c) | Classify antihistaminic drugs. Outline side effects and uses of H <sub>2</sub> blockers.            | <b>04</b> |
| <b>Q.3</b>  | (a) | Explain hepatic microsomal enzyme induction and inhibition with suitable examples.                  | <b>06</b> |
|             | (b) | Discuss therapeutic uses and adverse effects of $\beta$ -blockers.                                  | <b>04</b> |
|             | (c) | Justify following combinations:<br>1) Levodopa and Carbidopa<br>2) Local anesthetic and Epinephrine | <b>04</b> |
| <b>Q.4</b>  | (a) | Classify antihypertensive drugs. Write pharmacology of angiotensin receptor blockers.               | <b>06</b> |
|             | (b) | State mechanism of action and adverse effects of phenytoin.   | <b>04</b> |
|             | (c) | Write a note on methyl alcohol poisoning.   | <b>04</b> |
| <b>Q.5</b>  | (a) | What is receptor? Distinguish GPCR and nuclear receptor.  | <b>06</b> |
|             | (b) | Enlist oral hypoglycemic agents. Give mechanism of action of SGLT-2 inhibitors.                     | <b>04</b> |
|             | (c) | Write a note on oral contraceptives.  | <b>04</b> |
| <b>Q. 6</b> | (a) | Enlist routes of drug administrations. Give importance of each route.                               | <b>06</b> |
|             | (b) | Distinguish sedative and hypnotics. Outline disadvantages of barbiturates.                          | <b>04</b> |
|             | (c) | Discuss pharmacological actions of platelet activating factor (PAF).                                | <b>04</b> |
| <b>Q.7</b>  | (a) | Classify NSAIDs. Write mechanism of action and uses of aspirin.                                     | <b>06</b> |
|             | (b) | Enumerate lipid lowering drugs. Give mechanism of action and adverse effects of statins.            | <b>04</b> |
|             | (c) | Write a note on antitussive agents.   | <b>04</b> |

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