

International Islamic University Chittagong

Department of Pharmacy

B.Pharm (Hons.) Program

Midterm Examination

Spring Semester 2024

Course Code: PHARM-3505

Course Title: Pharmacology-II

Time: 1 hour 30 minutes

Full Marks: 30

(Answer any three questions from the followings. Figures in the right margin indicate marks)

-
- | | | | |
|----|----|---|---|
| 1. | a) | What are the types of receptors found to be involved in drug action? Explain the mechanisms of ion channel receptors with example and figure. | 5 |
| | b) | Analyze the roles of cAMP and Ca^{2+} ion as second messengers. | 5 |
| 2. | a) | Explain the mechanism of action of acetylcholine in decreasing heart rate, cardiac output and blood pressure. | 5 |
| | b) | Elucidate the action of atropine in the body along with its therapeutic uses and adverse effects. | 5 |
| 3. | a) | Classify adrenoceptors with their distribution, signaling pathway and function in the body. | 5 |
| | b) | Summarize the fate of norepinephrine from adrenergic neurons with figure. | 5 |
| 4. | a) | How do the selective α_1 receptor competitive blockers produce their action? Mention their indications. | 5 |
| | b) | Classify cholinergic drugs with examples. Outline the mechanism of action and adverse effects of salbutamol. | 5 |