

FACULTY OF PHARMACY

**B. Pharmacy 3/4-Year I-Semester (Non-CBCS)(Backlog) Examination,
August 2019**

Subject : Pharmacology - I

Time : 3 Hours

Max. Marks: 70

Note: Answer all questions. All questions carry equal marks.

- 1 a) What are different routes of drug administration? Compare the merits and demerits of oral and parenteral routes of administration. (8)
b) Define the following: (6)
 - (i) Therapeutic Index
 - (ii) Tolerance
 - (iii) Biological Half life
- OR**
- c) Define and classify the receptors. Explain in detail about G – protein coupled receptors (2+3+5)
d) Write short notes on LD₅₀ and ED₅₀ (4)
- 2 a) Explain the pharmacological effects and therapeutic uses of: (14)
 - (i) Physostigmine
 - (ii) Atropine
 - (iii) Propranolol
 - (iv) Prazosin
- OR**
- b) Classify the Cholinergic agents with examples. Write their actions on (i) Heart, (ii) Bronchioles, (iii) Intestine and (iv) Eye. Add a note on their therapeutic uses. (4+8+2)
- 3 a) Write about the classification of anti-depressant agents. Write in detail about the mechanism of action, therapeutic uses and adverse reactions of Selective Serotonin Receptors Inhibitors (SSRIs). (6+ 8)
- OR**
- b) Classify anti-epileptic agents and explain the mechanism of action and therapeutic uses of Sodium Valproate and Phenytoin. (2+6+6)
- 4 a) Define hypertension. Classify the antihypertensive agents with examples. Write about the mechanism of action and adverse reactions of ACE inhibitors and Calcium channel blockers. (2+6+6)
- OR**
- b) What is bronchial asthma? Classify anti-asthmatic drugs. Explain the pharmacology of any two drugs. (2+4+8)
- 5 a) Define Diuresis. Classify Diuretics and explain mechanism of action and therapeutic uses of loop diuretics and potassium sparing diuretics. (2+4+8)
- OR**
- b) Write about the mechanism of action and therapeutic uses of pantaprazole. (4)
c) Write short note on: (10)
 - (i) Anti-emetic agents
 - (ii) Laxatives

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