

**FACULTY OF PHARMACY****B. Pharmacy 3/4 I-Semester (Non-CBCS) (Backlog) Examination,  
January 2020****Subject: Pharmacology - I****Time: 3 Hours****Max. Marks: 70****Note: Answer all questions. All questions carry equal marks.**

1. (a) Write in detail about various biotransformation reactions with examples. 10  
(b) Define the following: 4  
(i) Therapeutic Index.  
(ii) Biological half life.

**OR**

- (c) Explain in detail about the advantages and disadvantages of different routes of drug administration. 14  
2. (a) Write the pharmacological effects of acetyl choline. 7  
(b) Explain the various therapeutic uses and adverse reactions of ( $\beta$ ) – adrenergic blockers. 7

**OR**

- (c) Explain the pharmacological actions and therapeutic uses of the following: 7+7  
(i) Acetylcholinesterase Inhibitors.  
(ii)  $\beta$  - Adrenergic blockers.  
3. (a) Classify anti-depressants and explain the mechanism of action, adverse reactions and therapeutic uses of any two class of drugs. 6+8

**OR**

- (b) Write the classification of Non-steroidal anti-inflammatory agents and explain the details of any two classes of drugs. 6+8  
4. (a) Define arrhythmia. Classify the anti-arrhythmic agents with examples. Write about the mechanism of action and adverse reactions of any one class of drugs. 2+5+7

**OR**

- (b) Write short notes on: 7+7  
(i) Bronchodilators.  
(ii) Anti-anginal agents.  
5. (a) Classify the agents used in treatment of peptic ulcer disease. Write about the pharmacological actions and therapeutic uses of Ranitidine and Omeprazole. 4+5+5

**OR**

- (b) Write about the following: 7+7  
(i) Anti-diarrhoeal agents.  
(ii) Anti-emetic agents.

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