



International Islamic University Chittagong
Department of Pharmacy

B. Pharm (Hon's) Program

Final Examination

Spring Semester 2019

Course Code: **Pharm-3505**

Course Title: **Pharmacology-II**

Time: 2 hours 30 minutes

Full Marks: 50

(Answer of separate groups should be given in separate scripts. Figures on right margin indicate marks)

Group A *(Answer any two questions from the followings)* **Marks: 20**

1. a) Which cardiovascular diseases are more common in recent days? Mention the risk factors of hypertension. 3
- b) Illustrate the mechanism of action, adverse effect and contraindication of propranolol. 4
- c) Elucidate the mechanism of action and therapeutic uses of ACE inhibitors. 3
2. a) Define diuretics. Classify diuretics based on their mode of action and site of action. 4
- b) Compare and contrast between ACE-inhibitors and calcium channel blockers. 3
- c) How does spironolactone produce its diuretic action? When to prescribe this drug? 3
3. a) Categorize the *in-vivo* and *in-vitro* anticoagulants. 3
- b) How does heparin work as an anticoagulant? State its pharmacological action, indication and contraindication. How you will manage heparin toxicity? 5
- c) Enumerate your idea on oral anticoagulants. 2

Group B *(Answer any three questions from the followings)* **Marks: 30**

4. a) Clarify the terms: antimicrobial and antibiotic. Classify antimicrobial agents according to spectrum, mode of action, and therapeutic use. 1+3
- b) Explain antimicrobial combination with example? When the combination therapy is essential? 2+2
- c) Distinguish between broad and narrow spectrum antibiotics. 2
5. a) Schematically compose the target sites of antimicrobial agents on bacterial cell. 4
- b) Represent the mechanism of action and spectrum of cephalosporin. 3
- c) Point out the way of β -lactam resistance by bacteria. 3
6. a) Postulate the theories of anesthesia provided by general anesthetics. 3
- b) Differentiate between LA and GA. 2
- c) Classify antifungal drugs. Mention the uses and side effects of griseofulvin. 5
7. a) Define anesthetics. What are the ideal properties of a general anesthetic? 3
- b) How does thiopental sodium work as an anesthetic? Mention its indication, contraindication and adverse effects. 4
- c) Write a little note on cocaine. 3