**Course Title: General Pharmacology**

**Student Name:**

**Student ID:**

**Note:**

* **Paper is divided into 5 questions**
* **Each question carry equal marks (10) with grand total of 50 marks**
* **Each question is composed of specific parts, pay attention to each part of question or otherwise it will lead to mark deduction**
* **Avoid copy paste from slides, your answer may got canceled if it found a total copy**

**This paper is specifically for students who missed midterm exam**

1. Define drug receptors, enumerate different receptor families and explain the receptor that shows its effect through second messenger system.
2. Define drug interactions, enumerate its various types, and explain pharmacokinetic drug interactions and its factors with examples.
3. Differentiate between general and local anesthesia, explain stages of anesthesia in detail
4.
5. What does heart failure means, explain the pathophysiology of heart failure
6. Classify the drugs used for the treatment of heart failure, explain along with mechanism.
7.
8. Differentiate between broad spectrum and narrow spectrum antibiotics, classify antibiotic drugs
9. Explain briefly the mechanism of action of antiviral agents
10. Enumerate various routes of drug administration, explain parenteral routes in detail.
11. What does water compartment means, explain its types in detail.

1. What are drug elimination stages, explain briefly
2. What does total body clearance means