Seat No: _____ Enrollment No: _____

PARUL UNIVERSITY
FACULTY OF PHARMACY
B.Pharm. 2018-19 Examination

Semester: 3 **Date: 26/04/2019**
Subject Code: 08101205 **Time: 10:00 am to 01:00pm**
Subject Name: Pathophysiology & Pharmacology **Total Marks: 75**

Instructions:
1. Figures to the right indicate full marks.
2. Make suitable assumptions wherever necessary.

Q.1 Essay type Questions. (Any 2 out of 3) (10 marks each) **(20)**

1. Explain signal transduction mechanism of G-protein coupled receptors. What is the difference between competitive and non-competitive antagonism.
2. What do you understand by apparent volume of distribution? Explain the factors affecting drug metabolism. Write a note on Phase I and Phase II reactions.
3. Define acute inflammation. Write in detail about cell events occuring acute inflammation. What are the difference between acute inflammation and chronic inflammation?

Q.2 Short Essay type Questions. (Any 7 out of 9) (5 marks each) **(35)**

1. Give the advantages and disadvantages of intravenous route of drug administration.
2. Explain the factors affecting the absorption of drugs.
3. Write a note on Biological effects of radiation.
4. Define the following terms with suitable examples: a) Agonist b) Antagonist c) Partial Agonist d) Inverse agonist e) Drug Potency
5. Explain various factors modifying drug action.
6. Discuss etiology of cell injury.
7. Define apoptosis. Explain meachanism of apoptosis.
8. Discuss etiology and pathogenesis of hypersensitivity type IV reactions.
9. Mention various sources of drugs with an example for each.

Q.3 Answer in short. (2 marks each) **(20)**

1. Explain the following terms : 1) toxicology 2) pharmacology
2. Define physiology and its importance.
3. Explain the terms: hypertrophy and atrophy.
4. Define Additive effect and Potentiation.
5. Write a note on nuclear receptor.
6. Define Clearance and its importance.
7. What is advantage of transdermal route of drug administration?
8. Write briefly on First pass metabolism.
9. Define therapeutic index and its importance.
10. Write a note on hypersensitivity type II Reaction.