

UKA TARSADIA UNIVERSITY

Maliba Pharmacy College

M. Pharm. Pharmacology 1st Semester Internal Examination December 2013**040050102 Cellular and Molecular Pharmacology**

Time: 10:30 a.m. To 1:30 p.m.

Max. Marks: 70

Date: 06/12/2013

Instructions:

- Attempt all questions.
- Make suitable assumptions wherever necessary.
- Figures to the right indicate full marks.

Q-1 a) What is necrosis? Describe various types of necrosis with suitable examples. **(5)**

OR

- a)** Describe various transport mechanism across the cell membrane.
- b)** Classify and elaborate different types of receptors with suitable examples. **(6)**

Q-2 a) Classify different types of drug antagonism. Explain competitive Antagonism with suitable examples. **(6)**

OR

- a)** Explain Down-regulation of receptors and Up-regulation of receptors suitable example
- b)** Differentiate between: **(6)**
1. Apoptosis and Necrosis
 2. Partial and Inverse agonists

Q-3 Answer the following questions. (any two) **(12)**

- a)** Give brief note on Muscarinic receptors- location, type, signal transduction and agonist-antagonists.
- b)** Describe receptor malfunction related diseases.
- c)** Describe the adaptive cellular and molecular responses in brain ageing.

Q-4 a) Write a note on peptide and its antagonist as drugs. **(5)**

OR

- a)** How GABA plays role in inhibitory post synaptic potential? How these actions can be modulated? **(5)**
- b)** Describe the role of TNF- α in various immunological and inflammatory disorders. **(6)**

Q-5 a) Describe the formation, metabolism and actions of Bradykinin **(6)**

OR

- a)** Describe medical applications of gene therapy.
- b)** Explain the clinical condition in which nitric oxide plays a significant role. **(6)**

Q-6 Answer the following questions. (any two) **(12)**

- a)** Differentiate Dopaminergic receptors
- b)** Write a note on calcium channels.
- c)** Classify GABA receptors, giving emphasis on their location, signal transduction and their agonists –antagonists