



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2010/2011
OPEN, DISTANCE AND E-LEARNING EXAMINATION FOR THE DEGREE
BACHELOR OF EDUCATION AND BACHELOR OF SCIENCE

SZL 207: ESSENTIALS OF CELL BIOLOGY

DATE: Thursday 3rd February 2011

TIME: 11.00a.m -1.00p.m

INSTRUCTIONS:

Answer all questions in Section A and any ONE question in Section B. With each section all questions carry equal marks. Illustrate your answers with diagrams and give examples wherever appropriate

SECTION A

Answer ALL questions (40 Marks)

1. State five differences between apoptosis and necrosis.
2. Describe the structures of class 1 and class 11 MHC molecules.
3. State the functions of gap junctions.
4. Illustrate types of integral membrane proteins in cell membranes
5. Describe the cellular mechanisms involved in release of neurotransmitters into the Synaptic cleft.
6. Compare facilitated diffusion to active transport.
7. Explain how cyclic AMP is formed.
8. Explain the meaning of the following:-
 - a) Antigen processing
 - b) Antigen presentation

SECTION B (30 Marks)

9. Discuss the properties and functions of cytokines.
10. Write an essay on the cause of cancer in humans.
11. Describe the mechanism facilitated diffusion in cells.