



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2013/2014

**THIRD YEAR SECOND SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR SCIENCE (MEDICAL LABORATORY
SCIENCE) WITH INFORMATION TECHNOLOGY**

(MAIN CAMPUS)

PMT 326: GENERAL PATHOLOGY AND PATHOPHYSIOLOGY

Date: 21st July 2014

Time: 11.00 – 1.00 pm

INSTRUCTIONS:

SECTION A

Answer ALL Questions (40 marks)

1. Differentiate between the terms "pathogenesis" and "virulence" (4 marks)
2. How do micro-organism cause disease? (4 marks)
3. Briefly explain how micro-organisms evade host defenses (4 marks)
4. What are the underlying mechanisms in the aetiology of asthma? (6 marks)
5. Differentiate between "encephalomalacia" and "encephalitis" (4 marks)
6. What are "free radicals" and how are they involved in apoptosis (6 marks)
7. What is "sickle cell anemia" and how does it arise? (6 marks)
8. Briefly explain the pathogenesis of "Goitre" (6 marks)

SECTION B (30 marks)

Answer Question 11 and Either Question 12 OR Question 13

11. Discuss the role of the following in hypertension (High blood pressure) (16 marks)
 - a) High extracellular fluid volume
 - b) High levels of dietary salt
 - c) Obesity
 - d) The Renin- Angiotensin system
12. Discuss the role of Vitamin D, Parathyroid hormone and Calcitonin in bone metabolism and how rickets or osteomalacia occur (14 marks)

OR

13. Discuss the following; (14 marks)
 - a) Mechanisms involved in uncontrolled cell proliferation
 - b) The genesis of a cancer cell
 - c) General principles in the action of cytotoxic anticancer drugs