



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2013/2014

**SECOND YEAR FIRST SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN MEDICAL
LABORATORY SCIENCES WITH INFORMATION TECHNOLOGY
(CITY CAMPUS - EVENING)**

**PMT 225: MEDICAL ENTOMOLOGY AND VECTOR
SCIENCES**

Date: 10th April, 2014

Time: 5.30 - 7.30 p.m.

PMT 225: MEDICAL ENTOMOLOGY AND VECTOR SCIENCES

70 MARKS 2 HOURS

SECTION A (40 MARKS). Answer ALL QUESTIONS from this section.

Q1. Name and briefly define three kinds of leishmaniasis

5 Marks

Q2. What characteristics are typical of the order Diptera?

5 Marks

Q3. Outline and explain three entomological factors affecting malaria transmission by adult female anopheles mosquitoes

6 Marks

Q4. Contrast the resting and feeding position of larvae of *Culex* and those of *Anopheles*

4 marks

Q5. What forms of filariasis are transmitted by insects other than mosquitoes?

6 Marks

Q6. What type of terrain is usually associated with the vectors mentioned in question 5 above?

4 Marks

Q7. Outline four (4) arboviral infections of humans, and for each one, mention the vector involved and effective method of its control

5 Marks

of diagrams, describe the typical eggs of *Anopheles*, *Culex* and *Aedes* species of
5 Marks

SECTION B (30 MARKS)

ANSWER ANY THREE QUESTIONS FROM THIS SECTION. EACH QUESTION IS 10 MARKS.

Discuss the importance of collection and counting of vectors.

Contrast the biology and control of *Glossina* species and *Triatoma* species

11. Distinguish between environmental modification and environmental manipulation as used in vector control

12. Using one named example of a genus of disease vector, describe how knowledge about the vector's behavior and ecology is used in the design of control interventions. Mention the control methods.