



# **THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE**

## ***Faculty of Business & Social Studies***

DEPARTMENT OF LIBERAL STUDIES, COMMUNITY DEVELOPMENT &  
COUNSELING

DIPLOMA IN COMMUNITY DEVELOPMENT COUNSELLING

(DCDC A09)

## **VECTOR, DISEASE AND EPIDEMIOLOGY**

END SEMESTER EXAMS

**SERIES:** APRIL/MAY 2010.

**TIME:** 3 HOURS

### **INSTRUCTIONS TO CANDIDATES**

Answer question **ONE** and any other **TWO** questions.

- Q.1 (a) Define the following terms as used in Epidemiology:
- (i) Population at risk.
  - (ii) A determinant (2 marks)
  - (iii) Intrinsic determinants (1 mark)
  - (iv) Extrinsic determinants (2 marks)
- (b) List and explain series of the Astages followed in epidemiological investigations of a disease. (15 marks)
- (c) Discuss measures that can be instituted to prevent and control malaria. (10 marks)
- Q.2 (a) (i) Plot a bar graph of disease occurrence versus percentage of total discharges for the following figures.
- |                         |    |           |
|-------------------------|----|-----------|
| Infectious diseases     | 30 |           |
| Pregnancy               | 15 |           |
| Respiratory diseases    | 12 |           |
| Blood diseases          | 10 |           |
| Injuries diseases       | 8  |           |
| Nut ration diseases     | 10 |           |
| Nervous system diseases | 5  |           |
| Others                  | 10 | (6 marks) |
- (ii) Define the terms;
- (I) Morbidity rate (2 marks)
  - (II) Mortality rate (2 marks)
- (b) Discuss stable and unstable malaria. (10 marks)

- Q.3 (a) Name **FOUR** plasmodium species. (4 marks)
- (b) Describe the stages of malaria fever development. (10 marks)
- (c) Briefly explain the various types of epidemiological study. (6 marks)
- Q.4 (a) Define and then compare incidence and prevalence of disease. (10 marks)
- (b) By using a life cycle, describe how the causative agent of malaria maintains itself in the environment. (10 marks)