



# **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. (2 marks)
  - (ii) A determinant (1 mark)
  - (iii) Intrinsic determinants (2 marks)
  - (iv) Extrinsic determinants (15 marks)
- (b) List and explain series of the stages followed in epidemiological investigations of a disease. (10 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 diseases.

<u>Diseases</u>	<u>Discharges</u>	
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)