



# **MACHAKOS UNIVERSITY**

**University Examinations 2017/2018**

**SCHOOL OF HEALTH SCIENCES**

**DEPARTMENT OF PUBLIC AND COMMUNITY HEALTH**

**SECOND YEAR FIRST SEMESTER EXAMINATION FOR BACHELOR OF SCIENCE**

**IN IN POPULATION HEALTH**

**HEH 200: INTRODUCTION OF EPIDEMIOLOGY**

**DATE:20/12/2017**

**TIME: 2.00-4.00 PM**

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## **INSTRUCTIONS**

This paper consists of two sections A and B

Section A is compulsory

Section B choose any two (2) questions

## **SECTION A (30 MARKS) COMPULSORY**

### **QUESTION ONE**

- a) Discuss cohort studies and how they are implemented (2 marks)
- b) Describe the term Cross-sectional study as used in Epidemiology (2 marks)
- c) Outline four(4) uses of epidemiology (4 marks)
- d) Distinguish between the following terms,
  - i. Prevalence and incidence as used in epidemiology (2 marks)
  - ii. Case Control and case studies (2 marks)
  - iii. Specificity and Sensitivity (2 marks)
- e) Explain four(4) preventive and control measures of Schistosomiasis (4 marks)

- f) Identify three(3) components of descriptive epidemiology (3 marks)
- g) Explain the influence of climatic changes in influx of diseases (3 marks)
- h) Describe three (3) major factors that affects prevalence rate (3 marks)
- i) Using relevant examples explain the term screening as applied in epidemiology (3 marks)

**QUESTION TWO (20MARKS)**

- a) Epidemiology deals with interventions towards control of diseases or conditions of diseases. Discuss primary interventions which can be used to address health problems in a community (10 marks)
- b) Discuss the role of epidemiology in Policy formulation (10 marks)

**QUESTION THREE (20MARKS)**

- a) Discuss the historical epidemiological perspectives and their contributions to the control and prevention of diseases (10 marks)
- b) Describe the application of the epidemiologic triad in disease control and prevention (10 marks)

**QUESTION FOUR (20 MARKS)**

- a) Discuss one of the disease determinant in details as applied in Epidemiology (5 marks)
- b) Discuss the natural history of a disease (10 marks)
- c) Explain the prognosis of Cholera as a major health problem in the society today and its causal factors which may precipitate its causation (5 marks)

**QUESTION FIVE (20 MARKS)**

- a) Discuss the applicable factors of disease occurrences in a community (10 marks)
- b) Discuss risk factors which contributes to transmission of hepatitis B and how prevention and control can be achieved (10 marks)