



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR
THIRD YEAR SECOND SEMESTER**

**SCHOOL OF TOURISM AND NATURAL
RESOURCE MANAGEMENT
BACHELOR OF SCIENCE IN ENVIRONMENTAL
STUDIES (BIOLOGY AND HEALTH)**

**COURSE CODE: EBH 304
COURSE TITLE: ENVIRONMENTAL
EPIDEMIOLOGY**

DATE: 20TH APRIL, 2018

TIME: 1100 – 1300HRS

INSTRUCTIONS TO CANDIDATES

Answer **ALL** questions in section **A** and any other **THREE** in section **B**.

This paper consists of 2 printed pages. Please turn over

PART A: ANSWER ALL QUESTIONS (25mks)

1. a) List any five important characteristics of human social systems. **(5 marks)**
- b) Differentiate between ecosystem and biodiversity. **(5 marks)**
- c) Illustrate how to calculate the following epidemiological measures.
 - i) Incidence **(2 marks)**
 - ii) Prevalence **(2 marks)**
 - iii) Mortality rate **(2 marks)**
- d) Briefly explain four major categories of water-related illnesses. **(4 marks)**
- e) Give the preventive and curative measures to reduce sources of infection during outbreak control. **(5 marks)**

PART B: ANSWER ANY THREE QUESTIONS (45mks)

2. Infection transmission can take place via many potential routes. Describe the infection routes. **(15 marks)**
3. A traditional model of infectious disease causation is known as the Epidemiologic Triad. With a relevant example, discuss the components of the Triad. **(15 marks)**
4. Describe the measures for controlling communicable diseases and epidemics. **(15 marks)**
5. Several uses of epidemiology have been described. Explain the application of epidemiology in healthcare. **(15 marks)**

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