



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2014/2015

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF PUBLIC
HEALTH (EPIDEMIOLOGY AND DISEASES CONTROL)

HPH 806: EPIDEMIOLOGY IN PRACTICE

DATE: MONDAY 30TH MARCH 2015

TIME: 2.00 P.M. – 5.00 P.M.

SECTION A: Answer ALL Questions.

1. Epidemiology provides a scientific approach in understanding health and disease among individuals and populations in public health practice; (10 marks)
- a) Define epidemiology (1 mark)
- b) Differentiate the following terms;
- i. Descriptive and analytical epidemiology (2 marks)
- ii. Sufficient cause and necessary cause (2 marks)
- c) Explain the following agent factors;
- i. Infectivity (1 mark)
- ii) Pathogenicity (1 mark)
- iii) Virulence (1 mark)
- iv) Immunogenicity (1 mark)
- v. Toxigenicity (1 mark)
2. A number of models of disease causation have been proposed. Among the simplest yet very useful of these is the epidemiologic triad or triangle. Using HIV as an example, describe factors of the 3 components of the classical epidemiological triad or triangle. (10 marks)
3. Epidemiology offers a platform to inform policy on disease prevention. Giving examples, differentiate the following terms as used in approaching public health prevention. (2 marks each)
- i. Primary prevention
- ii. Secondary prevention