

W1-2-60-1-6

**JOMO KENYATTA UNIVERSITY**

**OF**

**AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2016/2017**

**YEAR III SEMESTER II SPECIAL/SUPPLEMENTARY EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN MEDICAL MICROBIOLOGY**

**MMB 2372: EPIDEMIOLOGY**

**DATE: SEPTEMBER 2017 TIME: 2 HOURS**

**INSTRUCTIONS: ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS**

**QUESTION ONE (30 MARKS)**

1. Define the following terms;
2. Incidence [1 mark]
3. Prevalence [1 mark]
4. Prevalence [1 mark]
5. Mortality rate [1 mark]
6. Pathogenicity [1 mark]
7. Infectivity [1 mark]
8. Virulence [1 mark]
9. Describe the components of case definition in disease diagnosis. [6 marks]
10. Describe the contribution of the following scientist to the field of epidemiology;
11. Hippocrates [2 marks]
12. John Graunt [2 marks]
13. William Farr [2 marks]
14. Describe the classification of diseases based on its duration. [6 marks]
15. Outline THREE advantages and THREE disadvantages of case-control studies. [6 marks]

**QUESTION TWO (20 MARKS)**

1. Discuss the definition of epidemiology. [10 marks]
2. Discuss the application of epidemiology in public health. [10 marks]

**QUESTION THREE (20 MARKS)**

Discuss TWO models used in studying disease causation. [20 marks]

**QUESTION FOUR**

Discuss the chain of infection in infectious diseases. [20 marks]