

# MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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#### **University Examinations 2024/2025**

# SECOND YEAR SECOND SEMESTER EXAMINATION FOR CERTIFICATE IN ANIMAL HEALTH AND PRODUCTION

#### **AAP 1219: INTRODUCTION TO EPIDEMIOLOGY**

DATE: JANUARY 2025 TIME: 1<sup>1</sup>/<sub>2</sub> HOURS

#### **INSTRUCTIONS:**

Answer question **ONE** and any other **TWO** questions

## **QUESTION ONE (30 MARKS)**

a) Define the following terms (6 marks)

i. Pathogenicity

ii. Virulence

iii. Mortality rate

b) Outline any five benefits accrued from epidemiological studies (5 marks)

c) Outline five extent to which transmission of infectious agents is dependent upon (5 marks)

d) Describe three methods of data collection in epidemiological studies (6 marks)

e) Highlight five advantages of cohort studies (5 marks)

f) Highlight three important sources of veterinary data (3 marks)

## **QUESTUON TWO (15 MARKS)**

a) Describe eight steps to take in an outbreak investigation (8 marks)

b) Discuss seven methods of disease transmission (7 marks)

## **QUESTION THREE (15MARKS)**

- a) Discuss five categories of Temporal Patterns of a Disease (10 marks)
- b) Describe five strategies that infectious agents use for their maintenance (5 marks)

## **QUESTION FOUR (15MARKS)**

Discuss infectious bursal disease under the following heading;

i. Clinical signs (5 marks)

ii. Post mortem Signs (5 marks)

iii. Prevention and control (5 marks)