



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2015/2016

**FIRST YEAR SECOND SEMESTER EXAMINATIONS FOR THE
DEGREE OF MASTER OF PUBLIC HEALTH**

(CITY CAMPUS)

PHE 823: EPIDEMIOLOGIC DESIGNS

Date: 5th December, 2015

Time: 9.00 - 12.00 noon

INSTRUCTIONS:

PHE: 823: EPIDEMIOLOGIC DESIGNS

SECTION A: SHORT ANSWER QUESTIONS (SAQs) (60 Minutes)

INSTRUCTIONS:

- 1) **Answer All the FOUR (4) Questions in this section**

1. Highlight **FIVE (5)** uses of life tables in Epidemiologic studies (5marks)
2. List **FIVE (5)** factors that determine the choice of an epidemiologic study design (5marks)
3. List the **SEVEN (7)** key sections considered during the process of critical appraisal of published papers (5marks)

4. Below is information from a cohort study to determine the outcome of HIV/AIDs in most at risk population vs the non-exposed population
 - Exposed population505
 - Non-exposed population1745
 - Exposed and developed disease315
 - Not exposed and developed disease35

Questions:

- i. Relative risk? (1marks)
- ii. Attributable risk? (2marks)
- iii. Population attributable risk (2marks)

SECTION B:
LONG ESSAY QUESTIONS (LEQs) (120 Minutes)

INSTRUCTIONS:

1. There are **FOUR (4)** Questions in this Section
2. Answer **Question 1 COMPULSORY** and Any other two (2) question

LEQ 1.

As a Public health consultant, you have been appointed by the Ministry Of Health to lead a team to carry out a quantitative research on a disease of public health interest, Discuss any **FIVE (5)** quantitative methods in Epidemiologic study designs giving appropriate examples in each case that you would use in this investigation **(20marks)**

LEQ 2.

Describe important issues you would consider when planning for a community trial. **(10marks)**

LEQ 3.

Discuss 6 approaches used in controlling for confounders in epidemiological studies **(10Marks)**

LEQ 4.

The table below shows data outcome of a disease survey. Using this table, tabulate:

Age group	Disease					
	Total males	Cases Males	Deaths	Total Females	Cases Females	Deaths
0-4	20,000	2,400	400	24,000	3,200	600
5-14	15,000	2,200	150	19,000	2,600	360
15-44	12,000	800	120	14,800	1,200	80
45-64	8,000	700	80	9,200	480	80
65+	2,000	200	40	3,600	340	60

- a. Population attack rate? **(1marks)**
- b. Gender specific attack rate? **(1marks)**
- c. Crude mortality rate **(1marks)**
- d. Case fatality in males **(2marks)**
- e. Case fatality in females **(2marks)**
- f. Population age specific attack rates? **(2marks)**
- g. Comment on malaria incidences focusing on age group and gender **(1marks)**