JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCHENCES

UNIVERSITY EXAMINATION FOR THE MASTERS IN PUBLIC HEALTH
(BIOSTATICS & EPIDEMIOLOGY)
1st YEAR   SEMESTER TWO 2019/2020 ACADEMIC YEAR
KISUMU CAMPUS

COURSE CODE: **HES 5123**

COURSE TITLE: **ADVANCED BIOSTATISTICS**

EXAM VENUE: **STREAM**

DATE: 11/12/19   **EXAM SESSION: 9.00 – 12.00 NOON**

TIME: 3 HOURS

Instructions:

1. **Candidates are advised not to write on the question paper**

2. **Candidates must hand in their answer booklets to the invigilator while in the examination room**

SECTION A: SHORT ANSWER QUESTIONS (SAQs) (30 MARKS)

INSTRUCTIONS :

a) There are **TEN (10)** questions in the section.
b) Answer ALL the TEN questions in this section.

QUESTIONS

QUESTION ONE
Briefly explain why it is important to study demography **(2 Marks)**

QUESTION TWO
Explain three major factors that affect analysis of secular death trends **(2 Marks)**

QUESTION THREE
State three elements that are included in vital registration systems **(2 Marks)**

QUESTION FOUR
Diferrentiate between vital registration systems in low in come and high income countries **(2 Marks)**

QUESTION FIVE
Define the following terms : (a) fertility (b) facundity (c) parity **(2 Marks)**

QUESTION SIX
Define Crude Death Rate **(2 Marks)**

QUESTION SEVEN
Briefly explain what is meant by General Fertility Rate in a population: **(2 Marks)**

QUESTION EIGHT
State one measure that can be used in measuring mortality rate in a population **(3 Marks)**

QUESTION NINE
Define Maternal Mortality Rate and indicate how it can be calculated **(3 Marks)**

SECTION B: LONG ESSAY QUESTIONS (LEQs) (40 MARKS)

INSTRUCTIONS :
a) There are **THREE (3)** questions in this section
b) Answer questions ONE and any other (2) questions in this section
c) Question1 has 20 marks. Other questions have 10 marks each.

QUESTIONS ONE
Discuss the use of census and vital registration in low and high income countries **(20 Marks)**

QUESTION TWO
Discuss demographic changes that affect health in populations (10 Marks)

QUESTION THREE
Discuss how demographic transition affects population health **(10 Marks)**

QUESTION FOUR
Discuss différences on mortalités by income levels.