



MACHAKOS UNIVERSITY

University Examinations 2016/2017

SCHOOL OF HEALTH SCIENCES

DEPARTMENT OF PUBLIC HEALTH

**THIRD YEAR SECOND SEMESTER EXAMINATION FOR DEGREE IN
BACHELOR OF SCIENCE (POPULATION HEALTH)**

PPH 316 UNIT NAME: POPULATION HEALTH RISK ASSESSMENT

DATE: 6/6/2017

TIME: 11:00 – 1:00 PM

INSTRUCTIONS

This paper consists of two sections A and B

Section A is compulsory

Section B choose any two (2) questions

Illustrate your answers with neat, clear and well labelled diagrams where appropriate

SECTION A (COMPULSORY)

QUESTION ONE (30 MARKS)

- a) Define the following terms
 - i) Risk assessment (1 mark)
 - ii) Risk management (1 mark)
 - iii) Risk characterization (1 mark)
- b) State any three (3) methods which can be used to assess population health (3 marks)
- c) Explain the planning stage of health risk assessment (3 marks)
- d) Illustrate the relationship between exposure, dose and response (3 marks)
- e) Explain three (3) factors which influence population “exposure” to health risk (3 marks)
- f) State three (3) roles of risk management (3 marks)

- g) Giving examples, differentiate between risk uncertainties and risk modeling (3 marks)
- h) Explain variability and vulnerability in risk assessment (3 marks)
- i) Explain how risk assessment can influence policy development (3 marks)
- j) Explain how you can evaluate risks interventions (3 marks)

SECTION B: CHOOSE ANY TWO (2) QUESTIONS. EACH QUESTION IS 20 MARKS

QUESTION TWO (20 MARKS)

As a population health officer one of your responsibility is to assess population health risk.

- a) Define risk modelling (2 marks)
- b) Explain four (4) challenges you can face while conducting population health risk (8 marks)
- c) Discuss five (5) classification of population health risk (10 marks)

QUESTION THREE

A population health officer undertaking risk assessment must observe certain principles

- a) Define a principle (2 marks)
- b) Discuss the general principles of population health risk assessments (18 marks)

QUESTION FOUR (20 MARKS)

Health risk assessment is a scientific process. Identify and discuss the steps involved in performing a health risk assessment (20 marks)

QUESTION FIVE (20 MARKS)

- a) Describe four (4) different sources of information collected to perform a risk assessment (8 marks)
- b) Describe five (5) uses of risk assessment information (10 marks)
- c) Identify four (4) interventions which can be put in place to ensure a healthy population (2 marks)