THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

A. M. E. C. E. A

REGINA PACIS INSTITUTE OF HEALTH SCIENCES

MAIN EXAMINATION

JANUARY – APRIL 2018 TRIMESTER

FACULTY OF SCIENCES

DEPARTMENT OF COMMUNITY HEALTH AND DEVELOPMENT

REGULAR PROGRAMME

HPE 102: RESEARCH METHODOLOGY

Date: APRIL 2018	**Duration: 2 Hours**
INSTRUCTIONS: Answer ALL Questions	

SECTION A: ANSWER ALL QUESTIONS (40 Marks)

Q1. i) Distinguish between basic research and applied research **(2 marks)**

ii) Quantitative research and qualitative research **(2 marks)**
ii) Descriptive and analytical research **(2 marks)**
iv)   Null and alternate hypothesis **(2 marks)**
v) Observational and interventional studies **(2 marks)**

Q2. i) What are the three conditions that must be met in identifying a
researchable problem **(3 marks)**

ii) In county " Y " a report showed that in the first month there were 500
children under one year of age who started immunization, but at the end of
the year it was found out that only 25 children completed their vaccination.
Identify the problem. **(3 marks)**

Q3. Describe any four sources of literature review and state which ones are the most
reliable **(5 marks)**

Q4. i)   State any five characteristics of research objectives **(5 marks)**

ii) What is the importance of research objectives **(4 marks)**
iii) Distinguish between general objective and specific objectives by
explaining the purpose of each **(6 marks)**

Q5. The association between Dependent and independent variables is key in research. Outline the meaning of these two variables **(4 marks)**

SECTION B: ANSWER ANY THREE QUESTIONS (60 MARKS)

Q1. i) Discuss the importance of a clear statement of the problem in a scientific research **(10 marks)**

ii) Describe the importance of literature review in the development of a research proposal **(10 marks)**

Q2. As a researcher, you want to carry out a study on "factors associated with utilization of ANC services among maternal and women aged 15-49 years attending MCH clinic in selected hospitals in Green County.

The average MCH attendance in the selected hospitals is given below.

Kwetu	Kona	Kando	Katikati
40	55	60	45

i) State an appropriate broad objective for this study. **(2 marks)**

ii) Enumerate any THREE appropriate specific objectives. **(6 marks)**

iii) You have calculated a sample size of 75. Discuss the most appropriate sampling method that can be used in recruiting the study participants. **(12 marks)**

Q3. Discuss any five elements that are required in obtaining consent in human study subjects. **(20 marks)**

Q4. You have recognized that chronic renal failure is a major problem among patients admitted in your regional referral hospital. Some are waiting for organ transplant. You decide to carry out a study on this problem
  i) Describe the possible sources of bias during data collection. **(10 marks)**

ii) If one of the objectives is on "attitudes towards organ transplant among family members of patients with chronic renal failure", you can use focus group discussions and key informant interviews in collecting data. Explain the rationale of using the two methods. **(10 marks)**

Q5. i) Compare and contrast case control and retrospective studies. (10 marks)

iii)   Describe any THREE features of an experimental study design **(3 marks)**

iv)   State any THREE importance of randomization   **(3 marks)**

v)   Describe any THREE reasons for blinding in randomized trials. **(3 marks)**

END