

MACHAKOS UNIVERSITY

University Examinations for 2020/2021

SCHOOL OF HEALTH SCIENCES

DEPARTMENT OF PUBLIC AND COMMUNITY HEALTH

THIRD YEAR FIRST SEMESTER EXAMINATION

FOR BACHELOR OF PUBLIC HEALTH

HPH 300: RESEARCH AND RESEARCH METHODS

DATE: 9/8/2021 TIME: 2:00 – 4:00 PM

INSTRUCTIONS:

This paper consists of two sections A and B

SECTION A

Specific Instructions

- This section has one question
- The question is COMPULSORY
- The question is 30 Marks

QUESTION ONE (COMPULSORY) (30 MARKS)

a) Define the following terns used in research methods

(3 marks)

- i) Research design
- ii) Data
- iii) Population
- b) Miss Smith decided she would like to see if responsible men existed in families today. She decided to contact some couples that she knew, married or cohabiting and who had children, and interview the fathers. Explain the sampling technique used by Miss Smith (2 marks)
- c) A team of researchers decided to conduct an investigation to explore religious attitudes amongst young people in today's society. They wanted to collect primarily quantitative data. Explain three (3) suitable research designs that they could consider. (3 marks)

- d) Examine the following research question: "Which social factors, influence ARVS adherence among HIV infected youths in Machakos level 5 Hospital, Machakos County?" Highlight the target population, independent and dependent variable (3 marks)
- e) You wish to undertake a research on how the city of Nairobi has changed over the years to date. Identify the possible sources of data. (2 marks)
- f) Re write the following as it will appear in the reference list using APA styles
 - i) 'How corrupt Kenyan are, daily nation 23rd February 2019 page 7 and 8 by Johnson Muendo'. (3 marks)
 - ii) "Manktelow Belly, Hewitt Morr John, Spiers Noor. An introduction to Practical Statistics Using SPSS. Trent Focus, 2002". (3 marks)
- g) "Many a time research institutions are not convinced about the utility of research and refer it as an unnecessary activity over which no funds should be spent". Critique this statement (3 marks)
- h) Using a relevant example, relate purposive and snowball sampling methods. (3 marks)
- i) Mr Arnold has decided to do a research why some people are more likely to be victims of crime than others. Describe the ethical problems he may face with this topic.

(3 marks)

j) The following reads part of research results" Machakos County had ART coverage of 88%, 56% of the HIV cases were youths aged 15-24years and 45% are children aged 10-19years". Highlight two tools that may been used to generate this data (2 marks)

SECTION B:

Specific Instructions

- This section has four (4) question
- Answer any two (2) questions

Each question is 20 Marks

QUESTION TWO (20 MARKS)

- a) During the last two decades, there has been a dramatic change in prevention and control of diseases in the world. In view of the above statement, discuss the role of research in management of diseases (10 marks)
- b) Discuss various errors that can affect the quality of research (10 marks)

QUESTION THREE (20 MARKS)

The following is a research topic for a third year student in Machakos University.

"Cultural factors and use of contraceptives among women of reproductive age (15-45 years) in Machakos County"

| a) | State the purpose of above study | (2 marks) |
|----|---|-----------|
| b) | Formulate two specific objectives from the research topic. | (4 marks) |
| c) | State any two hypotheses from the research topic | (4 marks) |
| d) | Describe the inclusion and exclusion criteria for the above study | (4 marks) |
| e) | Explain the importance of literature review for the above study | (6 marks) |

QUESTION FOUR (20 MARKS)

- a) Discuss the problems encountered by young Kenyan researchers in the field of health sciences. (10 marks)
- b) Describe the procedure of establishing research tool reliability using test-re test technique (10 marks)

QUESTION FIVE (20 MARKS)

- a) Explain the reasons why you would prefer use of key informant interviews (KIIs) than questionnaire to collect data from the health cabinet secretary on covid-19 containment measures in Kenya. (10 marks)
- b) Describe the contents of an informed consent in research (10 marks)