

CHUKA



UNIVERSITY

SUPPLEMENTARY/ SPECIAL EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF
BACHELOR OF SCIENCE IN COMPUTER SCIENCE, BACHELOR OF SCIENCE
APPLIED COMPUTER SCIENCE**

COSC 380/ACSC 381: RESEARCH METHODS IN COMPUTER SCIENCE

STREAMS: BSC (COMP SCIE), BSC (ACSC)

TIME: 2 HOURS

DAY/DATE: WEDNESDAY03/02/2021

11.30 AM – 1.30 PM

INSTRUCTIONS:

Answer Question ONE and ANY other TWO Questions

Question One (30 Marks)

- a) Explain the following terms as used in research. (4 marks)
- (i) Population:
 - (ii) Sample
 - (iii) Sampling
 - (iv) Variable
- b) What is the purpose of research? (4 marks)
- c) State any five source of knowledge in research. (4 marks)
- d) Outline the major steps in research. (6 marks)
- e) State any six source of research problems. (6 marks)
- f) Discuss the importance of research questions in a research proposal (6marks)

Question Two

- a) State and explain any two approaches used in research methods (4 marks)
- b) Discuss the various components/sections of a research report (8 marks)

- c) State and explain any four tools which can be used in data collection when carrying out a research, citing their advantages and disadvantages. (8marks)

Question Three

- a) State and discuss any four methods of sampling designs (8 marks)
- b) Evaluate any three types of research citing their advantages and their disadvantages. (12 marks)

Question Four

The following is a research for a second year student in Chuka University.

“Factors influencing the rise of inflation in the Kenyan economy. A case of Chuka Municipality, Tharaka-Nithi County: Kenya”

- a) State the broad objective and any two specific objectives from the research topic. (5 marks)
- b) State any two research questions from the research topic. (5 marks)
- c) State any two hypotheses from the research topic (5 marks)
- d) Develop the problem statement from the above research topic (5 marks)

Question Five

- a) In writing a research proposal, literature review is a very important chapter. Explain the purpose of literature review in any research project. (5 marks)
- b) Briefly discuss any four ways of data presentation in a research project (8 marks)
- c) Highlight and explain the basic components of the research methodology chapter in any research project. (10 marks)
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