



MACHAKOS UNIVERSITY

University Examinations for 2021/2022 Academic year

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

..... YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE IN ELECTRICAL AND ELECTRONICS ENGINEERING

EEE 518: DIGITAL IMAGE PROCESSING

DATE:

TIME: 2 HRS

INSTRUCTIONS

Answer Question One and Any Other Two Questions



MACHAKOS UNIVERSITY

University Examinations for 2021/2022 Academic Year

DEPARTMENT OF TVET

SECOND YEAR FIRST TERM EXAMINATION FOR

CERTIFICATE OF INFORMATION COMMUNICATION TECHNOLOGY

1920/205: RESEARCH METHODOLOGY

DATE: 27/7/2022

TIME: 8.30-11.30 AM

INSTRUCTIONS

Answer question any **FOUR** questions

Don't write on this question paper

QUESTION ONE

- Explain the term *Research*, in details, as used in Research Methodology. (4 marks)
- Describe the following types of Research, describing the purpose of each:

- i. Basic Research:
 - ii. Applied Research:
 - iii. Evaluation Research. (6 marks)
- c) For a process to be called research, it is imperative that it has some characteristics. Critically discuss **five** of these characteristics. (10 marks)

QUESTION TWO

- a) Define the term *copyright* as used in research. (2 marks)
- b) Most students and beginners in research do not fully understand what a research proposal means, nor do they understand its importance. Describe why a research proposal is vital in a research Project. (6 marks)
- c) Discuss the main contents of the following research proposal sections:
- i. Title;
 - ii. Abstract;
 - iii. Introduction;
 - iv. Literature Review;
 - v. Methodology;
 - vi. References. (12 marks)

QUESTION THREE

- a) Describe **five** common Mistakes that researchers make in Proposal writing. (10 marks)
- b) When you start to think about your research project, a useful way of remembering the important questions to ask is to think of the five 'Ws': Describe the five Ws'. (10 marks)

QUESTION FOUR

- a) The research process is similar to undertaking a journey. Describe the different steps involved in a Research Process. (15 marks)
- b) Outline **five** ethical issues to be considered while undertaking Research. (5 marks)

QUESTION FIVE

- a) Objectives of the research should be SMART. Describe the term SMART as used in formulating research objectives. (10 marks)
- b) Research can be a long process and take up much of your time. It is important to stay interested in what you're doing if you are to complete your project successfully. Describe five **Considerations while selecting a research problem that will** help to ensure that your study will remain manageable and that you will remain motivated. (10 marks)