



ZIMBABWE

**MINISTRY OF HIGHER AND TERTIARY EDUCATION,
INNOVATION, SCIENCE AND TECHNOLOGY
DEVELOPMENT**

**HIGHER EDUCATION EXAMINATIONS COUNCIL
(HEXCO)**

NATIONAL DIPLOMA

IN

CONSTRUCTION ENGINEERING

MODULE: Research Methods

PAPER NO: 527/23/M10

DURATION: 3 Hours

OCTOBER/NOVEMBER 2024 EXAMINATION

REQUIREMENTS

Booklet, scientific calculator and graph paper.

INSTRUCTIONS TO CANDIDATE

Answer any five questions.

This paper consists of 2 printed pages.

QUESTION 1

- (a) List any ten qualities of a good researcher. (10 marks)
- (b) Differentiate between qualitative and quantitative data. (10 marks)

QUESTION 2

- (a) Explain the following terms:-
- (i) basic research (5 marks)
- (ii) applied research (5 marks)
- (b) Discuss sources of literature review. (10 marks)

QUESTION 3

List and explain major components of a research proposal. (20 marks)

QUESTION 4

Describe the following scales giving examples or diagrams:-

- (a) nominal scale (5 marks)
- (b) ordinal scale (5 marks)
- (c) interval scale (5 marks)
- (d) ratio scale (5 marks)

QUESTION 5

Define and compare sample and population showing their advantages and disadvantages. (20 marks)

QUESTION 6

- (a) Identify and describe the key steps involved in conducting a research study in construction engineering. (16 marks)
- (b) What is a hypothesis and what is its importance in construction engineering research. (4 marks)