



# MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)  
University Examinations for 2015/2016

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

FIRST SEMESTER EXAMINATION FOR DIPLOMA IN CIVIL ENGINEERING

**BCECD317: MEASUREMENT, ESTIMATING AND COSTING FOR CIVIL  
ENGINEERING WORKS**

Date:

Time:

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## INSTRUCTIONS:

- This paper comprises five questions
- Question **one** is **compulsory** and carries 30 marks
- All other questions carry 20 marks each
- Answer question **one** and any other **two** questions

### QUESTION ONE (30 MARKS)

- Explain EIGHT key differences of SMM of civil engineering work to that of building work (16 marks)
- Explain SEVEN reasons why SMMs for building projects are unsuitable for civil engineering works (14 marks)

### QUESTION TWO (20 MARKS)

- Give FOUR principles of units of measurements for civil engineering works (8 marks)
- Describe the SIX general for Measurement of civil engineering works (12 marks)

### QUESTION THREE (20 MARKS)

- What is cost estimating (2 marks)
- Explain FIVE Principles of Deciding Unit of Measurement: (10 marks)

- c) Give EIGHT qualifications of a good estimator (8 marks)

**QUESTION FOUR (20 MARKS)**

- a) Who is a quantity surveyor (2 marks)  
b) Give with explanation SIX key roles of a quantity surveyor (12 marks)  
c) Who is a nominated sub-contractor (4 marks)  
d) What is construction tender (2 marks)

**QUESTION FIVE (20 MARKS)**

- a) What is a construction contract (4 marks)  
b) State and explain the FIVE most common types of construction contracts used in the construction industry (10 marks)  
c) Explain the THREE tendering methods in construction (6 marks)