



# TECHNICAL UNIVERSITY OF MOMBASA

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SCHOOL OF ENGINEERING AND TECHNOLOGY  
DEPARTMENT OF ARCHITECTURE & BUILT ENVIRONMENT  
**UNIVERSITY EXAMINATION FOR:**  
BACHELOR OF ARCHITECTURAL STUDIES/BACHELOR OF  
ARCHITECTURE

**EAR 4109: BUILDING TECHNOLOGY I**

END OF SEMESTER EXAMINATION

YEAR ONE SEMESTER II

SERIES: APRIL 2022

**TIME: 2 HOURS**

**DATE:** Pick Date April 2022

**Instructions to Candidates**

You should have the following for this examination

*-Answer Booklet, examination pass and student ID*

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.

**Do not write on the question paper.**

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### **QUESTION ONE (30 MARKS-COMPULSORY)**

Describe SIX processes you would consider on desk study when selecting a site.

(30 marks)

### **QUESTION TWO (20 MARKS)**

- (a) Define the terms Damp Proof Cause (dpc) and Damp Proof Membrane (dpm).  
(6 marks)
- (b) Explain the function of each of them in the building substructure using load bearing walls.  
(8marks)
- (c) Explain how the introduction of cement impacted Architecture in the Imperial Roman Empire.  
(6 marks)

### **QUESTION THREE (20 MARKS)**

An Environmental expert is commissioned to work on a project in Mombasa town. What processes is he/she required to perform?  
(20 mark)

### **QUESTION FOUR (20 MARKS)**

- (a) Define the term Concrete in building construction.  
(4 marks)
- (b) Explain any FOUR foundation types.  
(16 marks)

### **QUESTION FIVE (20 MARKS)**

- (a) Define the term Building Site and when does the Site become a construction site.  
(5 marks)
- (b) In a construction site how key is levelling the site.  
(15 marks)