



# TECHNICAL UNIVERSITY OF MOMBASA

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SCHOOL OF ENGINEERING AND TECHNOLOGY  
DEPARTMENT OF ARCHITECTURE & BUILT ENVIRONMENT

**UNIVERSITY EXAMINATION FOR:**

DIPLOMA IN ARCHITECTURE

DIPLOMA IN QUANTITY SURVEYING

**EAR 2204: CONSTRUCTION MATERIALS 11**

END OF SEMESTER EXAMINATION

YEAR TWO SEMESTER I

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**

- a) Outline FOUR characteristics of good varnishes. (8 marks)
- b) Explain the process of varnishing (12 marks)
- c) Explain FIVE functions of paint. (10 marks)

### **QUESTION TWO (15 MARKS)**

- a) Explain THREE strategies that can improve firefighting properties of glass as a construction material. (9 marks)
- b) Mr. Karanja has just procured a shipment of annealed glass panels which he intends to use as external walls for his four storey office block. Explain the effectiveness of the chosen material. (6 marks)

### **QUESTION THREE (15 MARKS)**

Mr. Mkamburi intends to use plastic to roof part of his residential development. Explain FIVE properties of plastic that make it ideal for this.

### **QUESTION FOUR (15 MARKS)**

- a) Explain reasons for vulcanization of rubber (5 marks)
- b) Explain FIVE properties of rubber that make it ideal for flooring (10 marks)

### **QUESTION FIVE (15 MARKS)**

- a) Outline FIVE uses of gypsum in construction. (5 marks)
- b) Explain FIVE advantages of gypsum as a construction material. (10 marks)