



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ARCHITECTURE & BUILT ENVIRONMENT

UNIVERSITY EXAMINATION FOR:

DIPLOMA OF ARCHITECTURE

DIPLOMA OF QUANTITY SURVEYING

EAR 2204: CONSTRUCTION MATERIALS II

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: SEPTEMBER 2018

TIME: 2 HOURS

DATE: Pick Date Sep 2018

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 any **THREE** questions.

Do not write on the question paper.

Question ONE

- (a) Outline the procedure for fixing wall paper. (6 Marks)
- (b) Name and describe the **THREE** ingredients of a Varnish. (9 Marks)
- (c) Briefly explain the functions of base as a principal constituent of paint. (5 Marks)

Question TWO

- (a) With the aid of a sketch, describe the impact strength test for plastics. (6 Marks)
- (b) Briefly describe **TWO** ways in which moulding of plastics is carried out. (4 Marks)
- (c) Describe the following as applied to Rubber:
 - (i) Plasticization

- (ii) Compounding (5 Marks)
- (d) Outline the FIVE properties of silicone rubber. (5 Marks)

Question THREE

- (a) Briefly describe TWO mechanical properties of glass. (5 Marks)
- (b) Briefly describe THREE types of special glasses. (9 Marks)
- (c) Explain TWO classifications of glass based on composition and properties. (6 Marks)

Question FOUR

- (a) Describe the following bituminous products;
- (i) Coal tar
 - (ii) Pitch
 - (iii) Bitumen
- (9 Marks)
- (b) Briefly explain SIX properties of bitumen. (6 Marks)
- (c) Briefly describe TWO forms of Asphalt. (5 Marks)

Question FIVE

- (a) Briefly explain THREE precautions taken while handling lime. (6 Marks)
- (b) Briefly describe the following tests carried out on Lime:
- (i) Heat test
 - (ii) Hydraulic test
- (6 Marks)
- (c) Explain FOUR characteristics of sand for mortar. (4 Marks)
- (d) Explain FOUR precautions taken in the use of mortars. (4 Marks)