



MACHAKOS UNIVERSITY

University Examinations for 2020/2021

SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF BUILDING AND CIVIL ENGINEERING
SECOND YEAR SECOND TERM FOR
CERTIFICATE (TVET) IN BUILDING TECHNOLOGY
1704/204CM: CONSTRUCTION MATERIALS II

DATE: 7/6/2021

TIME: 8:30 – 11:30AM

INSTRUCTIONS TO CANDIDATES

This paper consists of FIVE questions.

Answer ALL the questions.

All questions carry equal marks

1. a) Briefly explain the following;
 -thermoplastics
 -thermosetting plastics (4 marks)
- b) List down ten properties of plastics (10 marks)
- c) Mention any six constituents of plastics (6 marks)
2. a) Define the term rubber (2 marks)
- b) Outline and briefly explain various classifications of rubbers (9 marks)
- c) Identify nine uses of rubber (9 marks)
3. a) Enumerate five functions of paint (10 marks)
- b) Explain the following terms in regard to paints;
 -base
 -vehicle
 -pigments

- solvents
 - driers (10 marks)
4. a) Explain the functions of the following ingredients in glass;
- silica
 - lime
 - soda
 - potash (8 marks)
- b) Describe the classification of glass (9 marks)
- c) Mention three uses of glass in a building (3 marks)
5. a) Define the term alloy hence cite two examples of an alloy (3 marks)
- b) List down three types of steel and mention two uses of each (6 marks)
- c) Explain the following terms;
- brittleness
 - malleability
 - elasticity
 - toughness (8 marks)
- d) State three methods of casting iron (3 marks)