



MACHAKOS UNIVERSITY

University Examinations for 2020/2021

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

SECOND YEAR SECOND TERM EXAMINATION FOR

DIPLOMA IN BUILDING TECHNOLOGY

DIPLOMA IN CIVIL ENGINEERING

CONSTRUCTION MATERIALS 1

DATE: 17/6/2021

TIME: 2:30 – 5:30 pm

INSTRUCTIONS:

ANSWER ALL QUESTIONS

- 1) Explain TEN characteristics of a construction materials (20 marks)
- 2) a) Describe the following clay products
 - i) Terracotta
 - ii) Majolica
 - iii) Porcelain
 - iv) Earthenware (8 marks)
- b) Explain TWO methods used in timber seasoning (8 marks)
- c) Explain two tests done to timber (4 marks)
- 3) a) Discuss three methods used for quarrying stones (12marks)
- b) Describe three tests done to a construction stones (6 marks)
- c) List four uses of stones (2 marks)
- 4) a) Draw a cross-section of a mature tree and name all the parts (12 marks)
- b) Give four timber defects (4 marks)
- c) State four characteristics of good timber(4marks)

- 5) a) Give four USES of first class bricks (4 marks)
- b) Illustrate the following types of bricks
- i) Coping brick
 - ii) Perforated brick
 - iii) Hollow brick
 - iv) Queen brick (10 marks)
- c) Describe four common defects in bricks (6 marks)