



MACHAKOS UNIVERSITY

University Examinations for 2020/2021

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

SECOND YEAR SECOND TERM FOR

DIPLOMA IN BUILDING TECHNOLOGY

1704/203BS: BUILDING SERVICES

CONSTRUCTION MATERIALS 1

DATE: 15/6/2021

TIME: 8:30 – 11:30 AM

INSTRUCTIONS TO CANDIDATES

1. a) Explain six physical characteristics of a construction materials (10 marks)
 b) Explain four mechanical characteristics of construction materials (10 marks)
2. a) Give four properties 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)
3. a) Give six qualities of a good construction stone (12 marks)
 b) Describe three tests done to a construction stone (6 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 (4 marks)

5. a) Describe the following clay products
- i) Terracotta
 - ii) Majolica
 - iii) Porcelain
 - iv) Earthenware (8 marks)
- b) Explain four methods used in stone dressing (8 marks)
- c) Explain two tests done to timber (4 marks)