



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2020/2021

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE
IN CONSTRUCTION MANAGEMENT

BCM 201: CONSTRUCTION MATERIALS AND TESTING

DATE: THURSDAY 8TH APRIL 2021

TIME: 11.00 A.M. - 1.00 P.M.

INSTRUCTIONS:

1. Question ONE (1) is compulsory (30 marks)
 2. Answer any other TWO (2) questions from the remaining four questions. (40 marks)
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1.
 - a) State at least EIGHT (8) general properties of materials. (8 marks)
 - b) Describe the four categories of defects that occur in timber. (10 marks)
 - c) Using sketches illustrate typical ply woods, block board, lamin board and chip board. (10 marks)
 - d) Define the term properties of materials. (2 marks)
 2.
 - a) According to the manner of their geographical formation, all stones fall into one of the three classes. Name them and state the group of stones that fall under each of the classes. (12 marks)
 - b) State at least EIGHT (8) properties of clay bricks. (8 marks)
 3.
 - a) Briefly define the following terms: (10 marks)
 - i. Water: Cement ratio
 - ii. Workability
 - iii. Batching
 - iv. Construction joints
 - v. No-fines concrete
 - b)
 - i. Define the term Slump test as used in concrete. (1 mark)
 - ii. By use of diagrams, describe a slump test. (9 marks)

4. a) State at least FIVE (5) practical precautions against corrosion of metals. (5 marks)
- b) Define the following terms in relation to metals. (10 marks)
- i. Casting
 - ii. Rolling
 - iii. Extrusion
 - iv. Drawing
 - v. Forging
- c) State at least FIVE (5) methods used in application of metal coating. (5 marks)
5. a) Outline factors to be taken into account in the selection of mastics as building materials. (8 marks)
- b. By use of sketches illustrate at least FOUR (4) methods of sawing timber. (12 marks)
