



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)
University Examinations for 2015/2016

SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

FIRST SEMESTER EXAMINATION FOR DIPLOMA IN BUILDING TECHNOLOGY

BCE BD 308 MEASUREMENT OF BUILDING WORKS

Date: 8/8/2016

Time: 8.30 – 10.30AM

INSTRUCTIONS:

- *This paper comprises FIVE questions*
- *Question one is compulsory and 30 marks*
- *Answer any other two questions*
- *Use standard method of measurement for Building works (SMM)*

1. Take off all quantities shown on drawing no. 01 for substructures up to and including dpc. (30 marks)
2. Square, abstract and bill all items in question no.1 above, using current construction rates. (20 marks)
3. Take off all quantities for the superstructures shown on drawing no.02 above p.c.c slabs up to and including the steel water tank. (20 marks)
4. a) List 4 main roles of the following personnel in a building project.
 - i) Architect
 - ii) Quantity surveyor. (8 marks)b) Briefly explain the following types of bills of quantities.
 - i) Traditional bill
 - ii) Elemental bill

- iii) operational bill (12 marks)
- 5. a) Define the following terminology as used in bills of quantities
 - i) Standard method of measurement (smm)
 - ii) Preambles
 - iii) Provisional sum
 - iv) Prime cost sum (8 marks)
- b) Explain the following methods of tendering stating 2 advantages and disadvantages in each case.
 - i) Open tendering
 - ii) Selective tendering
 - iii) Nomination (12 marks)