



MURANG'A UNIVERSITY COLLEGE

(A constituent college of Jomo Kenyatta University of Agriculture and Technology)

SCHOOL OF ENGINEERING

DEPARTMENT OF BUILDING AND CIVIL

COURSE CODE: SEB 1326

MEASUREMENTS OF CIVIL ENGINEERING WORKS

CLASS: BC/C 14D JAN

END OF SEMESTER II EXAM

TIME: 2HOURS

- **Instructions:-** Question ONE is compulsory Attempt any other TWO questions.
- Marks for each question are allocated at the end of each.

1. Take off all quantities for the underground tank shown on drawing No. 02. (USE CESMM) (30 mrks)
2. Take off all quantities for the substructure works shown on drawing No. 01. Upto Damp proof level (USE SMM) (20 mrks)
3. a). Highlight five functions of bill of quantities (5mrks)
b). Define the following terms as used in measurements (6mrks)
 - i. Deemed to be included
 - ii. Extra over item
 - iii. Spot item
- c). Explain the procedure of preparing bill of quantities using traditional method (9mrks)
4. a). Draw a dimension paper and show the functions of each part (4mrks)
b). Differentiate between prime cost and provisional sum using appropriate examples (6mrks)
c). Using illustrations define the following (10mrks)
 - i. Dotting on
 - ii. Nil
 - iii. Bracketing

iv. stoking

5. a. Prepare an abstract paper for the question number ONE (1) or TWO (2) above (10mrks)
- b. Prepare a bill of quantity for the Question number ONE (1) above or TWO (2) (10mrks)