



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ARCHITECTURE & BUILT ENVIRONMENT

UNIVERSITY EXAMINATION FOR:

DIPLOMA OF QUANTITY SURVEYING

EQS 2201: MEASUREMENTS II

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: SEPTEMBER 2018

TIME: 2 HOURS

DATE: Pick Date Sep 2018

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

The Board of Management members at Mazaras Girls High School on seeing what their counterparts have accomplished at Mazaras High School, and also having received a generous donation to complete their stalled construction of 5 No. identical classrooms each measuring 8600mm long and 7200mm wide internally. Each class has cupboard measuring 1800mm x 2100mm high at the left front corner in timber framing and shutters complete with ironmongery; and a chalk board measuring 5000mm long and 1000mm high with 100mm x 25mm timber lining on top and sides; and 100mm x 25mm moulded bottom softwood piece for dusters and chalks. Each class has 1 No. 1200mm x 2400mm hardwood panel double door and 5 No. 1800mm x 1500mm high timber-framed louvred windows. There is a row of 16 No. 200mm x 200mm columns at the front façade integrated into the rest of the building by 200mm wide and 300mm deep ring beam which also runs over all wallings as well. The roof is gabled with pitch at 22.5 degrees. The floor is finished in terrazzo with 150mm high skirting and coved at junction with walling. The walling is plastered and painted internally; and, rendered and painted externally. The ceiling is finished in 50mm x 50mm softwood timber branding and softboards and then painted. The roof is covered in box-profiled gauge 28 roofing pre-painted roofing sheets.

Question One:

Assuming that the classrooms are adjoined and all walling is 200mm in thickness, and that the frontage passage is 1200mm wide, prepare Bills of Quantities for the floor finishes, internal and external wall finishes, ceiling finishes and roofing coverings. Show all your workings and state all your assumptions clearly. (30 marks)

Question Two:

Prepare Bills of Quantities for all the doors and all their associated decorations and ironmongery. Show all your workings. (15 marks)

Question Three:

Prepare Bills of Quantities for the windows and all their associated decorations. Show all your workings. (15 marks)

Question Four:

Prepare Bills of Quantities for all the fittings and all their associated decorations and ironmongery. Show all your workings. (15 marks)

Question Five:

- a) What is meant by the following terminologies in Quantity Surveying: Bills of Quantities, Standard Method of Measurement and preambles? (3 marks)
- b) State and explain measurement principles. (12 marks)