FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA SCHOOL OF ENVIRONMENTAL TECHNOLOGY DEPARTMENT OF QUANTITY SURVEYING



FIRST SEMESTER EXAMINATION 2017/2018 SESSION COURSE CODE: QTS 211 COURSE TITLE: CONSTRUCTION MEASUREMENT I TIME ALLOWED: 2 Hours INSTRUCTION: Attempt all Questions. Read the questions carefully and credit shall be given to neat presentation of works. The use of besmm4 is allowed

QUESTION ONE

- a. The essence of measurement standards is hinged on the need to have a common language and approach in the measurement of construction work. What are the main reasons for the consistency in the rule? 13marks
- b. Itemise checklist that can assist in achieving satisfactory results when taking-off quantities 6 marks
- c. The process of measurement of building or civil engineering works is often referred to as "Taking off". Enumerate the essential knowledge a taker off should possess. (6 marks)

QUESTION TWO

Using the drawings labeled FUTMX/SET/QS/2018/221A-D and the specification notes given below take-off for the substructure complete. 35marks

Site and Specification

- a. Bushes found on site 20.00m x 19.00m
- b. Topsoil of average depth 150mm to be preserved in temporary spoil heaps 20.00m away from excavation site.
- c. Plain in-situ concrete to be (1:2:4-19mm aggregate)
- d. Reinforced in-situ concrete in bed (1:3:6- 38mm aggregate)
- e. block work to be 225mm thick hollow sandcrete blocks in cement and sand mortar 1:3, and filled solid with weak concrete (1:4:8-40mm aggregate)