

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



SECOND SEMESTER EXAMINATION 2018/2019 ACADEMIC SESSION
COURSE CODE: QTS 521/COURSE TITLE: ADVANCED BUILDG MEASUREMENT II
TIME ALLOWED: 3 Hours CREDIT LOAD: 3 Units
INSTRUCTION: Answer ANY THREE (3) questions
Only BESMM3/4 are allowed. All assumptions must be clearly and reasonably stated

Question One

Use the attached Drawing No QTS521/2019/01 and Detail 01 to take off quantities for the HOT water installation, including Hot water cylinder and boiler.....[20 Marks]

Question Two

Use the attached Drawing No QTS521/2019/02 to take off quantities for the following in relation to drains below ground level:

- a) Manhole (Complete)..... [10 Marks]
- b) Trench excavation for pipework; pipework and associates; and concrete hunching to pipes only..... [10 Marks]

Question Three:

- a) Drawing No QTS511/2018/03a is a plan and section of a North light barrel vault shell roof. You are required to take of quantities for the following:
 - i) Concrete work.....[6 Marks]
 - ii) Formwork; [4 Marks]
 - iii) Roof light glazing.....[4 Mark]
- b) Drawing No QTS511/2018/03b is a plan and section of a Hose-reel Fire-fighting Installation. You are required to take off quantities for '*hose reel equipment*' and '*general builders*' work only.....[6 Marks]

Question Four

- a) The management of the Federal University of Technology, Minna is proposing to construct a 10-storey office building for the staff of S.E.T. It is required that installation of a lift in the building will provide a means of vertical transportation within floors. You have been consulted as a final year student of QS department of the institution use Drawing No QTS521/2019/4a to take off for:
 - i. Lift shaft (concrete work, formwork and reinforcement and felting on roof)....[8 Marks]
 - ii. Lift machine and general builders' work.....[2 Marks]
- b) Use the attached Drawing No QTS521/2019/4b to take off complete for the foul drains above ground level.....[10 Marks]

OK
3/10/2019