



FIRST SEMESTER EXAMINATION 2017/2018 SESSION

COURSE CODE: QTS 511 COURSE TITLE: ADVANCED BUILDING MEASUREMENT I

TIME ALLOWED: 3 Hours

CREDIT LOAD: 3 Units

INSTRUCTION: Answer all questions; Only BESMM3/4 are allowed; and all assumptions must be clearly and reasonably stated

Question One:

- a) Use the attached **Drawing No QTS511/2018/01a** and **Detail 02** to take off quantities complete for the foul drains above ground level(15 Marks).
- b) The attached **Drawing No QTS511/2018/01b** is a plan and section of reinforced concrete roof dome. You are required to take off quantities for concrete work and formwork only.....(5 Marks).

Question Two:

Drawing No QTS511/2018/02 are the sectional views and plans of a cold-water installation for a proposed staff-quarters residential development of the Federal university of Technology, Minna. You are required to use the drawing and **Detail 01** to take off quantities for the following:

- a) Cold water Installation (Complete)..... (15 Marks)
- b) Sanitary Appliances..... (5 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 off quantities for the following:
 - i) Concrete work.....(4 Marks)
 - ii) Formwork; (3 Marks)
 - iii) Roof light glazing.....(1 Mark)
- b) **Drawing No QTS511/2018/03b** is a plan and section of a Hose-reel Firefighting Installation. You are required to take off quantities for '**hose reel equipment**' and '**general builders**' work only.....(4 Marks)
- c) **Drawing No QTS511/2018/03c** is a plan and section of Fuel and Gas Station. Use the drawings to take off quantities for the following:
 - i) Trench excavation for underground pipes; and Pipes and fitting works.....(6 Marks)
 - ii) Fuel storage tank and insulation.....(2 Marks)