FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

SCHOOL OF ENVIRONMENTAL TECHNOLOGY
DEPARTMENT OF QUANTITY SURVEYING
FIRST SEMESTER EXAMINATION, 2018/2019 SESSION

COURSE CODE: QTS416   COURSE TITLE: Tendering & Estimating III
TIME ALLOWED: 2 HOURS   CREDIT LOAD: 2 Units
INSTRUCTION: Attempt All Questions.

1. a) Discuss the three (3) major forms of wastage which allowances made in material estimating cover. *(8 Marks)*
   b) Mention five (5) basic information required for estimating preliminary items.*(5 Marks)*
   c) Estimate the preliminary cost to be inserted in the bill of quantities for contractor's site supervision for a project of which you are the Quantity Surveyor in- charge. Contract period is 18 months. Make necessary assumptions. *(12 Marks)*

2. a) 35nos vitreous china low level W.C suite complete with cast iron cantilever bracket and wooden plug fixed to concrete floor are to be fixed in the toilet of a ten – storey building. Estimate the cost of the work as the Quantity Surveyor in – charge of the project. Make necessary assumptions. *(15 Marks)*
   b) 32mm PVC tubing with coupling is in the running length, fixed with clips @ 1m c/c. Calculate the cost/m. Take cost of the full length tubing pipe to be ₦2,000. Make other assumptions accordingly. *(10 Marks)*

3. a) 2.5mm twin core PVC cable in conduit. Calculate the cost of 200m. Take the cost/m of 2.5mm PVC cable to be ₦175. (10 Marks)
   b) 20mm PVC rigid screwed conduit fixed to concrete or block wall in chases. Calculate the cost of 500m. Take cost/m of 20mm PVC conduit to be ₦550. *(15 Marks)*

4. a) Define what you understand by pro – rata rates and state the methods of assessing pro – rata rates. *(8 Marks)*
   b) What are the basic features of a correct estimate in Civil Engineering works? *(7 Marks)*
   c) Use neat sketches to illustrate each of the documents below which are used for calculations in Civil Engineering works.
      i. Details of measurement form
      ii. Abstract of cost form
      iii. Abstract of quantities form
      iv. Material statement form
      v. Labour statement form *(10 Mark)*