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

SECOND SEMESTER EXAMINATION 2017/2018 SESSION
COURSE CODE: *QTS 324* COURSE TITLE *TENDERING AND ESTIMATING*
TIME ALLOWED: $1^1/_2$ *Hours*   CREDIT LOAD: *2 Units*
INSTRUCTIONS: (i) *Answer Questions (5) and any other three.* (ii) *Assume reasonable material prices*

1 (i) Your Company has been approached to submit an quotation for **trench excavation** work to receive foundation not exceeding 1.5m deep starting 150mm below ground level. Build up rate for the excavation work and determine the contract sum if the total quantity of excavation is 100m³

(ii) Estimate the unit rate if the local price of excavation is N1,500.00 per partition of 3.6m

2 Estimate unit rate for 225mm bed of **hardcore filling** compacted and blinded with fine sand 150mm (m²)
   Labour Output:
   Laying of stones = $1^1/_2$ Labour-hours
   Labour spreading sand = 0.5 labour-hour

3 Your Company was to bid for a **blockwork** contract in Lokoja, Kogi State, as the company's Quantity Surveyor build up rate for the following;
   (i)   150mm blockwork in cement mortar (1:6) laid in stretcher bond.
   (ii)   What will be the contract sum if the total quantity of the blockwork was 700m²
            Notes (a) Laying of blocks output 8 gang- labours
                      (b) Mixing mortar = 0.09m³ at 5hours/m³ per Labourer

4 You are been requested to tender for the reinforcement work of the construction of a Dam. The reinforcement work was quantified to be 30tonnes. Build up rate for the **20mm diameter mild steel reinforcement** in beams, columns, slab and staircase. Estimate the total contract sum.
   Note: Labour output for cutting, bending and fixing rod=140hours

5 Build up rate for **sawn formwork** to edge of bed 150mm wide (Unit of measurement metres) for a proposed auditorium project in Federal University of Technology, Minna. It was to be tendered for by your establishment, prepare an estimate for your company if the total length of wood is 250m. Labour making formwork 3hrs/m³; Labour fixing 2hrs/m²; Labour stripping $1^1/_2$hrs/m². Assume other missing details.