TERTIARY AND VOCATIONAL EDUCATION COMMISSION
COMMON WRITTEN EXAMINATION – 2020

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NVQ Level 05 - Semester II		
Quantity Surveying		
Estimating & Tendering	**F45T001M11**	**Three Hours**
Answer all questions		

Question 01

1) What are the different types of tendering? Briefly explain one of it?
2) Briefly explain about the stages of tendering process?
3) State at least four (04) costs resulted due to the lack of health and safety environment at the construction site?
4) Differentiate the **measure and pay contract and lump sum contract**?

(4×5 marks=20maks)

Question 02

1) What are the different types of estimates in relation to the construction industry? Briefly explain at least two of them?
2) What are the five basic components in a unit rate?
3) Differentiate the terms tender and estimate?
4) List out six (06) factors which should be considered when calculating all in rate for the labour?

(4×5marks=20maks)

Question 03

Briefly explain all of the followings

1) Provisional sum
2) Preliminaries
3) Mobilization advance
4) Bid evaluation
5) All in rate for material

(5×4marks=20maks)

Question 4

Calculate unit rate per 1m^2 of following working items

Grade 25 reinforced concrete in suspended slab thickness = 150mm in first floor level

Use only following pricing information

1 bag cement (50kg) Rs 930.00 including delivery
Allow 1 hour unskilled for unloading and stacking of 1ton cement .
residue waste 2%on cement .

Density of cement 1420 kg/m3
1m3 sand Rs 7000.00
1m3 of 20 mm metal Rs 6500.00 including delivery
Density of sand 1600 kg/m3 (approximately)
Density of metal 1600kg /m3 (approximately)
Metal required for 1m3 of Gr 25 concrete
Cement 320kg 1m3
Aggregate 1800kg
Fine aggregate 40%
Coarse aggregate 60%

Mixing
Hourly hiring rate for mixer with operator Rs 3000.00

Mixer Capacity 3 m^3 per hour
1skill labour 1unskill labour handmix 1m^3 for 1hour
Wastage on concrete 10%

Placing
Hourly hiring rate of vibrator with operator Rs 1250.00
1 mason and 3 unskilled workers will place 0.25m3 per hour

All in rates for labour
Skilled labour Rs 1500.00
Unskilled Rs 1250.00

Question 05

Calculate an hourly plant all in rate for truck using the following data & information

1) Purchase price :Rs 3,500,000.00
2) Scrap value: Rs 400,000.00
3) Life of plant: 20000 Hours
4) Tax and insurance: 12.5% of hourly description cost
5) Repairs & maintenance: 12.5% of hourly description cost
6) Lubricant oil: 5 liters per 40hours week (Rs 900/= per liter)
7) Fuel: 20 liters per day (Rs 117/= per liter)
8) Tyre lifespan :9000 hours
9) Cost for tyre: Rs 12,500.00 (4 tyres required for the truck) **(20marks)**