



TERTIARY AND VOCATIONAL EDUCATION COMMISSION



COMMON WRITTEN EXAMINATION – 2021/ 2022

Diploma in Quantity Surveying

NVQ Level 05 –Semester I

Measurement - I

F45C002M02

Three Hours

Answer all questions

Instructions to candidates:

- I. Calculation – Attention to be drawn on methods of measuring dimensions, waste calculations, accuracy of dimensions, entering the dimensions in appropriate columns, clear and accurate work descriptions with standard abbreviations, abstracting and billing techniques.
- II. Query Sheet – All queries should be listed together in a Query Sheet with assumptions made and should be attached with your answer papers.
- III. Method of Measurement – Your answers should be based on the Method of Measurement for Building works SLS 573 – 1999 (First Revision).
- IV. Non programmable calculators can be used.

Specifications

- a. Site clearance – clear entire land of 25 perches.
- b. Removing trees – Remove 3 trees of each 400 mm, 900 mm, 1150 mm girth
- c. Concrete – Foundation – cement concrete 1:3:6 (25 mm)
- d. Rubble work – Built in cement mortar 1:5
- e. DPC – 12 mm thick in cement sand 1:3 treated with 2 coats hot tar on top & blinded with fine sand

Schedule of Finishes

Element	Finishes	Description
Walls	Internal plaster	16 mm thick in cement and sand 1:5 finished smooth
	External Plaster	12 mm thick in cement and sand 1:5 finished semi rough
	Internal Painting	One coat of pillar and two coats of emulsion paint of approved colour and quality
	External Painting	One coat of pillar and two coats of weathershield paint of approved colour and quality

Question No 01

Take off quantities for the substructure using **Annexure 01** and the given Specifications (You are **not required** to take off quantities for Dry earth filling, DPM and floor concrete)

(60 Marks)

Question No 02

Take off quantities for the wall finishes with necessary deductions using **Annexure 01** and the given Specifications and schedule of finishes.

(20 Marks)

Question No 03

Prepare bar bending schedule for the given beam details in **Annexure 02**. **You are required to provide all the length calculations and assumptions neatly.**

(20 Marks)