

TRIBHUVAN UNIVERSITY
INSTITUTE OF
ENGINEERING
Examination Control
Division
Model Question

Exam	Regular		
Level	BE/BAR	Full Marks	60
Program	BCE	Pass Marks	24
Year / Part	III / II	Time	3 Hrs

Subject:- Estimation and Costing (ENCE 351)

1. Define Estimate. What are the units of measurements and payments of the following items? [4]

- | | |
|-----------------------------|--|
| i) Earth work in excavation | ii) Woodwork in door and window shutters |
| iii) W.C pan | iv) Reinforcement work |
| v) White washing | vi) Half brick work |

2. What are the methods used for preparing approximate estimate? How preliminary estimate does differs from detail estimate? [6]

3. Prepare an rate analysis for the following. [8]

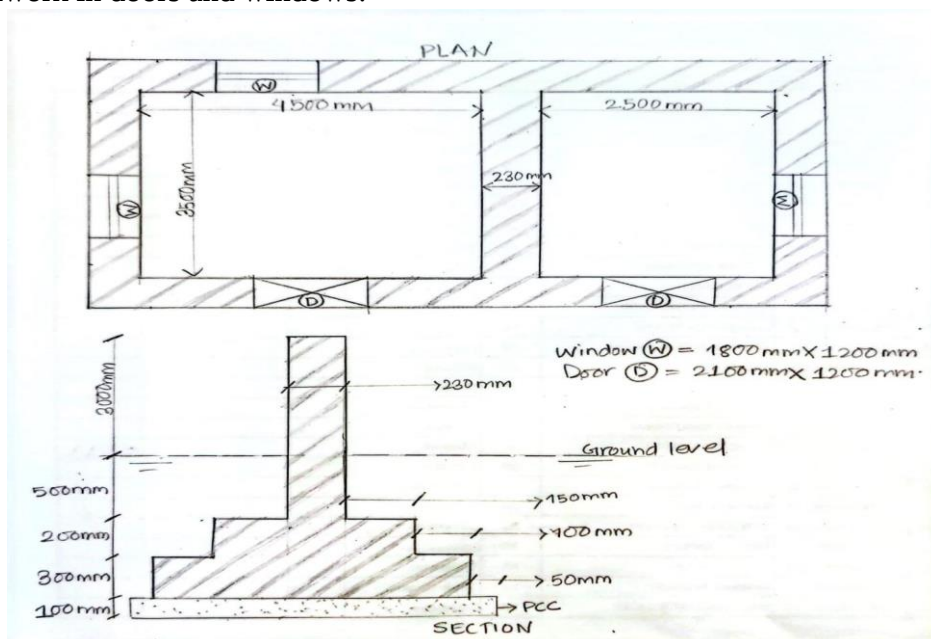
- M20 (1:1.5:3) Grade Concrete
- W.C commode with low level cistern.

4. Define valuation. Why is it important? What are the method used for valuation of the properties?[6]

5. Estimate without specification is baseless. Justify. [4]

6. Estimate the following quantities from the building drawing given below.[8]

- Earthwork in foundation.
- Brickwork in foundation
- Brickwork in Structure
- Woodwork in doors and windows.



7. Find the quantity of material required for [6]

- i. 20mm plaster over an area of 100m^2 .
- ii. 30m^3 of brickwork (1:3) Cement Mortar.

8. Calculate earthwork for a road portion from the following data: [10]

Formation width = 9 m in cutting and 10 m in banking

Side slope in cutting = 1:1

Side slope in Banking = 2:1 (H:V)

Formation Level is of upward gradient @1:150

Chainage	Ground Level	Formation Level	Cross Slope of Ground
0+000	839.5	840.0	10:1
0+030	840.4		15:1
0+060	841.1		12:1
0+090	840.9		10:1

9. Write Short notes on: (Any two) [8]

- i. Bill of Quantities
- ii. Sinking Fund
- iii. Detail Specification.
- iv. Supplementary Estimate