

GUJARAT TECHNOLOGICAL UNIVERSITY**BE – SEMESTER- VII EXAMINATION-SUMMER 2023****Subject Code: 2170610****Date: 21/06/2023****Subject Name: Professional Practices and Valuation****Time: 10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) Calculate surface area & volume of a cylinder having diameter of 1.2 m & height of 3 m.	03
	(b) Differentiate between earnest money deposit & security deposit.	04
	(c) Explain centre line method for calculating quantities of various items of work with a suitable example.	07
Q.2	(a) Differentiate between estimation & valuation.	03
	(b) What are the factors affecting rate analysis ?	04
	(c) Calculate the quantity of following item of works from details of a building as shown in figure - A & figure – B.	07
	1) Earthwork in excavation in foundation 2) Brickwork in C. M. (1:4) in foundation 3) Flooring work	
OR		
	(c) Calculate the quantity of following item of works from details of a building shown in figure - A & figure – B.	07
	1) P. C. C. (1:3:6) work in foundation 2) Brickwork in C. M. (1:4) in super structure 3) R. C. C. (1:2:4) work in slab	
Q.3	(a) Explain open tender with its advantages & disadvantages.	03
	(b) Differentiate between depreciation & obsolescence.	04
	(c) A construction equipment is purchased for Rs. 5,00,000. Its scrap value is 10 % of its purchase cost after useful life of five years. Take rate of interest equal to 6 %. Using straight line method & constant percentage method, calculate annual depreciation & book value at the end of each year of life of equipment & represent it in a tabular form.	07
OR		
Q.3	(a) Discuss briefly item rate contract with its advantages & disadvantages.	03
	(b) The details of entry steps for a building are – Riser = 15 cm, Trade = 30 cm, Length of Steps = 1.5 m, Number of Steps = 4. Calculate the quantity of brick work in steps.	04
	(c) Explain in brief various principles of writing good specifications.	07
Q.4	(a) Enlist various reasons for termination of contract.	03
	(b) Calculate quantity of various materials required for 15 m ³ of concrete work with the proportion of 1 : 1.5 : 3.	04

- (c) Explain in detail rental method of valuation of property & state its disadvantages. **07**

OR

- Q.4** (a) What are the factors affecting task work ? **03**
(b) Explain material supply contract with its advantages & disadvantages. **04**
(c) Explain plinth area method & service unit method of preparing approximate estimate of buildings with the help of suitable example. **07**

- Q.5** (a) Enlist important points to be included in the tender notice. **03**
(b) What are the purposes of writing specification ? **04**
(c) What are the purposes of valuation ? **07**

OR

- Q.5** (a) Enlist various conditions of contract. **03**
(b) Write a short note on scrutiny of tenders. **04**
(c) Work out rate analysis for 1st class brick masonry work in C. M. (1:4) for super structure. Assume prevalent market rates for materials and labours. **07**

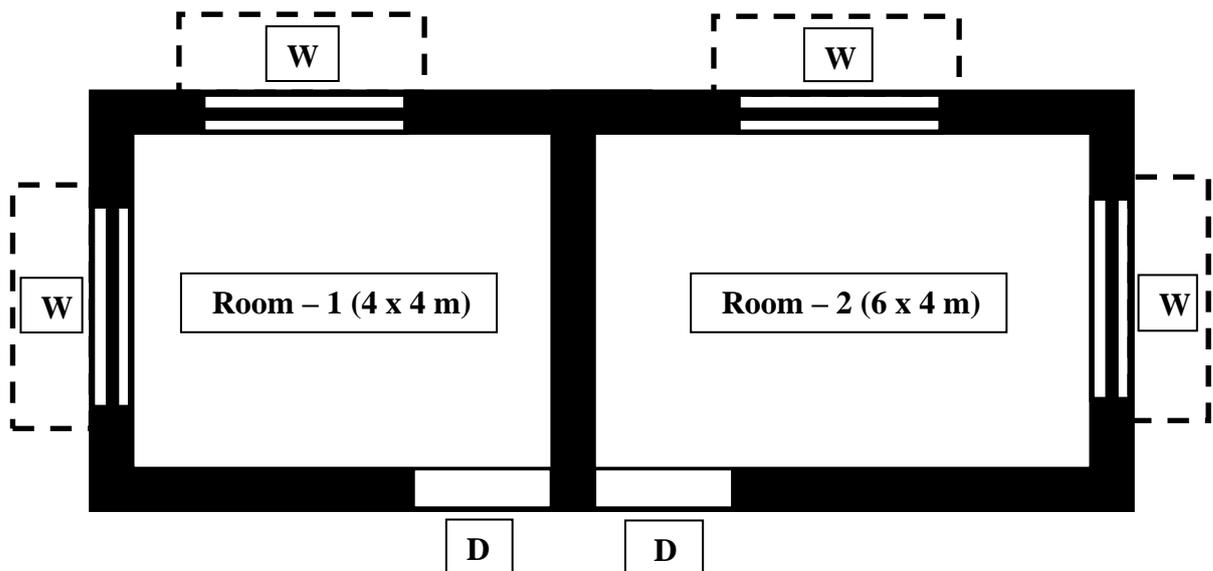


Figure – A Plan of Residential Building

D = 1.2 x 2.1 m

W = 1.5 x 1.2 m

Wall thickness at superstructure level = 0.3 m

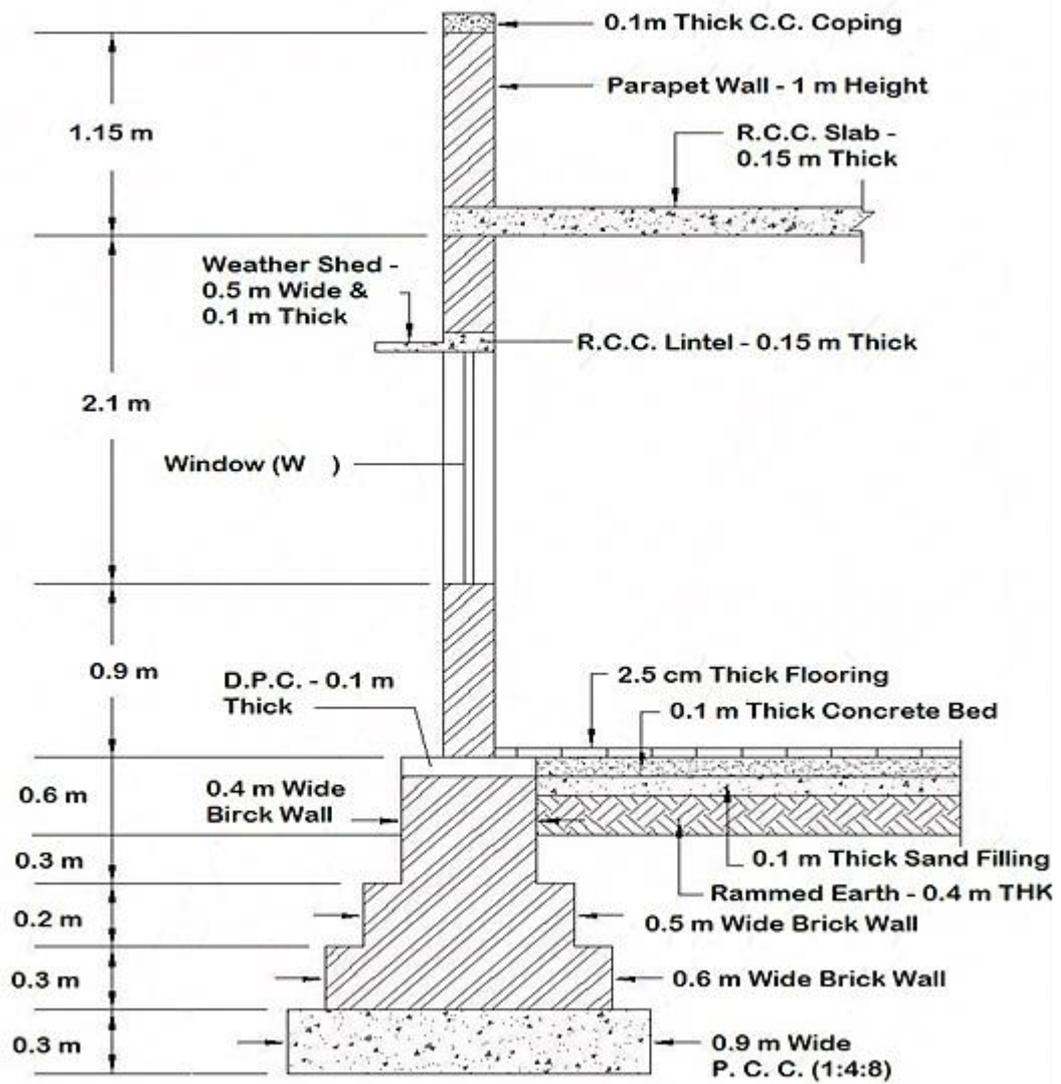


Figure – B Cross-Section of Wall
