

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER– VII (NEW) EXAMINATION – WINTER 2021****Subject Code:2170610****Date:03/12/2021****Subject Name:Professional Practices and Valuation****Time:02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

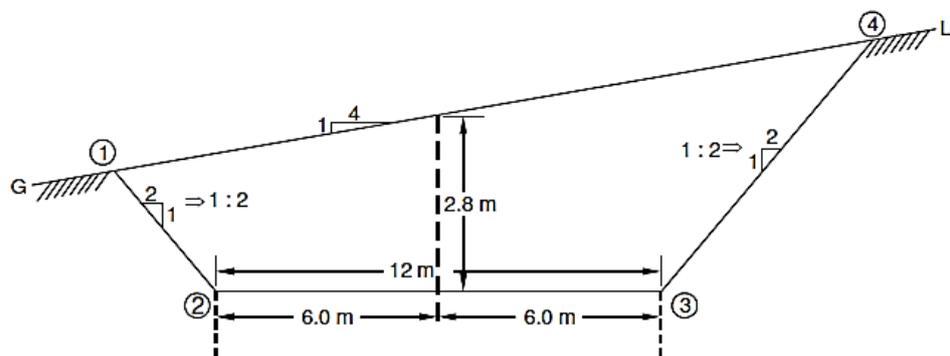
1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

MARKS

- Q.1**
- (a) State and explain the purpose of preparing estimate. **03**
- (b) Write the formula for volume and surface area for the following shape: **04**
- i. Cuboid
 - ii. Sphere
 - iii. Hemisphere
 - iv. cylinder
- (c) For the Figure 1 find the quantities of following items of work by Long-wall Short-wall method. Earthwork in excavation in foundation trench **07**
- i. Lime concrete in foundation
 - ii. First class brick work in 1:6 cement mortar in foundation and plinth
 - iii. 2.5 cm thick DPC (1:2:4) with water proofing compound
- The dimensions of doors, windows and selses are:
- | | |
|-----------|--------------------|
| Door D | = 1.20 m × 2.10 m. |
| Windows W | = 1.00 m × 1.50 m |
| Shelves S | = 1.00 m × 1.50 m |
- Q.2**
- (a) What are the legal requirements of a valid contract? **03**
- (b) State the types of specifications. Describe General, Technical and Standard specifications. **04**
- (c) Carry out the rate analysis for 1st Class Brickwork in Superstructure in Cement Mortar (1:4). Assume prevalent market rates for materials and labours. **07**

OR

- (c) A hilly ground as shown in following figure has a cross-slope of 1 : 4 (V : H), and the proposed road formation, entirely in cutting, (1) – (2) – (3) – (4) has to be constructed. Calculate the area in cutting. **07**

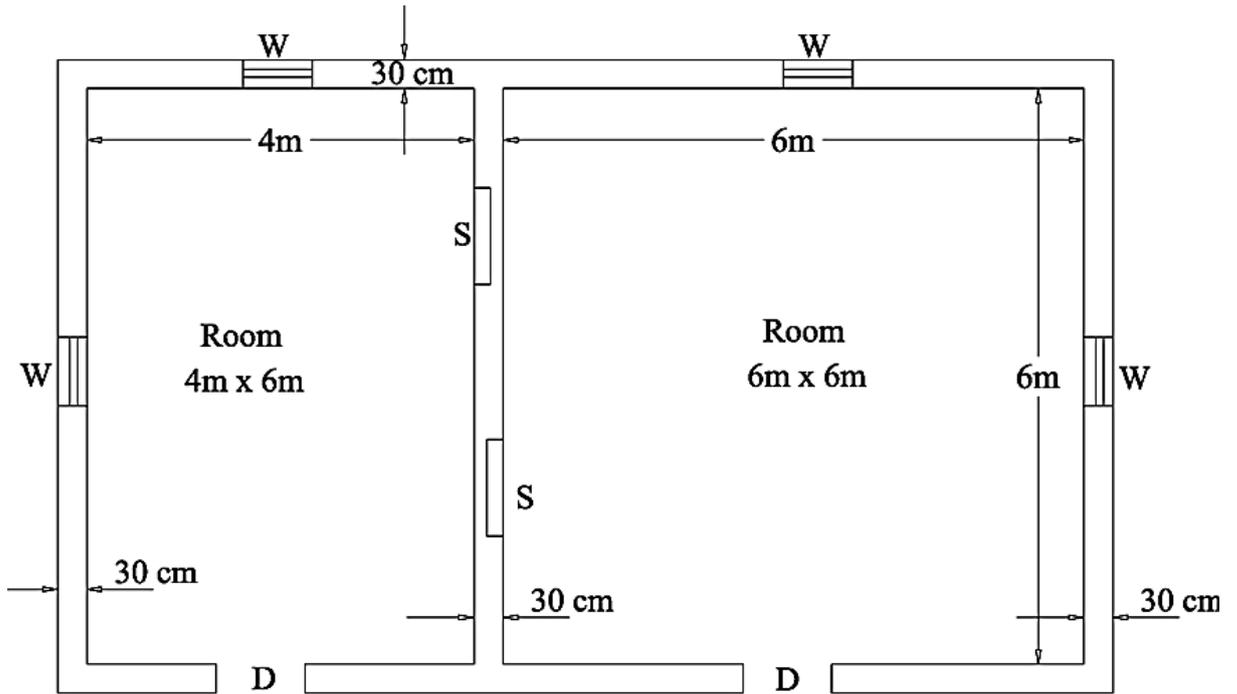


Q.3	(a) Enlist the factors affecting the market rate of civil engineering materials.	03
	(b) Explain the advantages and disadvantages of an Item Rate Contract.	04
	(c) Draft a tender notice for Jungle cutting of road area and Tree plantation including one year free maintenance for a National Highway of your choice.	07
OR		
Q.3	(a) What Care would you take while drafting specifications?	03
	(b) What is meant by restricted specifications? What are the advantages and disadvantages of it?	04
	(c) Write detailed specification for RCC slab in M20.	07
Q.4	(a) Write short note on Scrutiny of tender.	03
	(b) Write some important Provisions of IS-1200 for working out quantities and deductions in civil works	04
	(c) Write detailed specification for earthwork.	07
OR		
Q.4	(a) Explain in brief about task work, sundry & work charge establishment.	03
	(b) Explain in brief earnest money deposit and Security deposit.	04
	(c) Provide the prevailing market rate of the following materials in your city:	07
	i. 10 mm diameter MS Bar,	
	ii. Gully trap,	
	iii. 53 grade Portland cement,	
	iv. 20 mm nominal size coarse aggregate,	
	v. 1 st class bricks,	
	vi. Kota stone,	
	vii. Oil paint	
Q.5	(a) Explain in detail termination of contract.	03
	(b) Write the detailed specification for the cement plaster in CM (1:6) on walls.	04
	(c) A building costing Rs. 3, 50,000/- has recently been constructed in a big city. The plot measuring 450 sq. m was purchased @ Rs. 150/- per square meter. Work out the rent of the property. Assume 8% as net return on the cost of the construction and 4 1/2 % on the land value. All expected outgoing are Rs. 10000/- per year.	07
OR		
Q.5	(a) Discuss various types of estimates	03
	(b) Explain the factors affecting the value of property.	04
	(c) Enlist the various methods of valuation and explain any one in detail.	07

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FIGURE 1

PLAN



DETAILS OF FOOTING

