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M S RAMAIAH INSTITUTE OF TECHNOLOGY

(AUTONOMOUS INSTITUTE, AFFILIATED TO VTU) **BANGALORE - 560 054**

SEMESTER END EXAMINATIONS - JANUARY 2012

Course & Branch B.E. - Civil Engineering

Subject

Estimating and Costing

Max. Marks: 100

Subject Code

CV701

Duration

: 3 Hrs

Instruction to the Candidates:

• Question No.1 and any three of the remaining questions.

UNIT - I

The accompanying sketch shown in Fig.1 indicates the plan and section of a residential building. Prepare a detailed estimate for the below mentioned items with abstract.

•	Earth work excavation for foundation in ordinary soil	(06)
•	Providing and laying foundation bed concrete in CC 1:4:8	(04)
•	Size stone masonry in CM 1:6 for foundation course	(10)
•	DPC (1:3:6)	(04)
•	200mm Hollow concrete block in CM 1:6 for super structure.	(10)
•	100 MM Hollow concrete block for partition walls.	(05)
•	Plastering for interior walls and ceiling	(10)
•	Fully paneled teak wood doors, windows, ventilators.	(06)

2. Following table gives RL for a portion of 400m length of road. Compute (15) the quantity of earth work by mean area method.

Distance (m)	1000	1040	1080	1120	1160	1200	1240	1280	1320	1360	1400
R.L. of ground	31.0	30.9	30.5	30.8	30.6	30.7	31.2	31.4	31.3	31.0	30.6
R.L. of Formation	32.0	DOWN GRADIENT 1 in 100									

Road width = 10m, side slope 2:1 in filling 1.5:1 in cutting Plot the typical longitudinal section for the same.

Write detailed specifications for the following: 3.

(15)

- 20mm thick cement plastering in CM 1:5 over brick masonry i)
- ii) Cement concrete bed for foundation 1:4:8
- iii) Painting steel and iron works
- 4. Analyse the rate per unit for the following items of work.

(15)

- i) Brick masonry in CM 1:6 for super structure
- ii) Cement plastering in CM 1:4 for brick wall
- R.C.C. roofing of 12cm thick with 1% steel reinforcement of iii) M20 grade.



5.	Prepare a	a detailed	estimate	of a	manhole	for	the	following	items.	Refer	(15)
	Fig.2.							•			

- i) C.C. bed in foundation 1:3:6
- ii) BBM in cement mortar 1:4
- iii) Plastering with cement mortar 1:4
- 6. Write short notes on the following:

(15)

- i) Earnest money deposit and security deposit
- ii) Lumpsum contract and item rate contract
- iii) Tender and quotation



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