

QUANTITY SURVEYING & COSTING

Time Allowed : Three Hours

Note : Question No. I is compulsory.

 2×5

- (i) One cubic metre of cement concrete (1:2:4) is to be mixed by volume. Number of cement bags required will be approximately —
- (a) 1 (b) 5
(c) 6 (d) 11
- (ii) The unit of measurement for electric wiring or electrification light, fan plug point is—
- (a) Point
(b) Metre
(c) Number
(d) No unit

(iii) Generally the unit of measurement for partition wall is—

- ~~(a)~~ Cu m
- (b) Sq m ✓
- (c) Running metre
- (d) Numbers

(iv) A revised estimate is prepared if the sanctioned estimate exceeds—

- (a) 2%
- (b) 5%
- ~~(c)~~ 8%
- (d) 10%

(v) The thickness of 25 gauge sheet is—

- (a) Less than 1 mm
- (b) 1 mm
- (c) Between 1 mm and 1.5 mm
- ~~(d)~~ 2 mm

(vi) The estimated qty of cement required in cement mortar 1:6 per cubic metre will be—

- (a) 5.6 bags
- (b) 4.8 bags
- (c) 8 bags
- ~~(d)~~ 3 bags

(vii) The total estimated cost of a building electrification usually accounts for—

- (a) 1%
- (b) 2%
- ~~(c)~~ 8%
- (d) 15%

(viii) The value of property that can be obtained at any particular time from the open market if the property is put for sale is known as—

- (a) Market value
- (b) Book value
- ~~(c)~~ Current value
- (d) Obsolescence value
- (e) Rateable value

(ix) When a contractor is paid certain percentage over the actual cost of the construction as his profit such contract is termed as—

- (a) Lump-sum contract
- (b) Work order
- (c) Schedule contract
- ~~(d)~~ Cost plus percentage contract

(x) A fixed stipulated sum of penalty payable by the contractor having no relationship with real damage is known as—

- (a) Fixed penalty
- (b) Liquidated damages
- ~~(c)~~ Damage charges
- (d) Compensatory payment

(xi) In a detailed estimate the provision for contingencies is usually—

- (a) 1 percent
- ~~(b)~~ 3 to 5 percent
- (c) 10 percent
- (d) 12 to 15 percent

Q.II Differentiate between the following—

- (a) Revised estimate and supplementary estimate
- (b) Plinth area estimate and supplementary estimate

or

Write down the units of measurement and unit of payment for the following items of work—

- (a) Rock excavation 5
- (b) Earth filling in plinth
- (c) Surface dressing and levelling cleaning etc.
- (d) Sand filling
- (e) Cement concrete

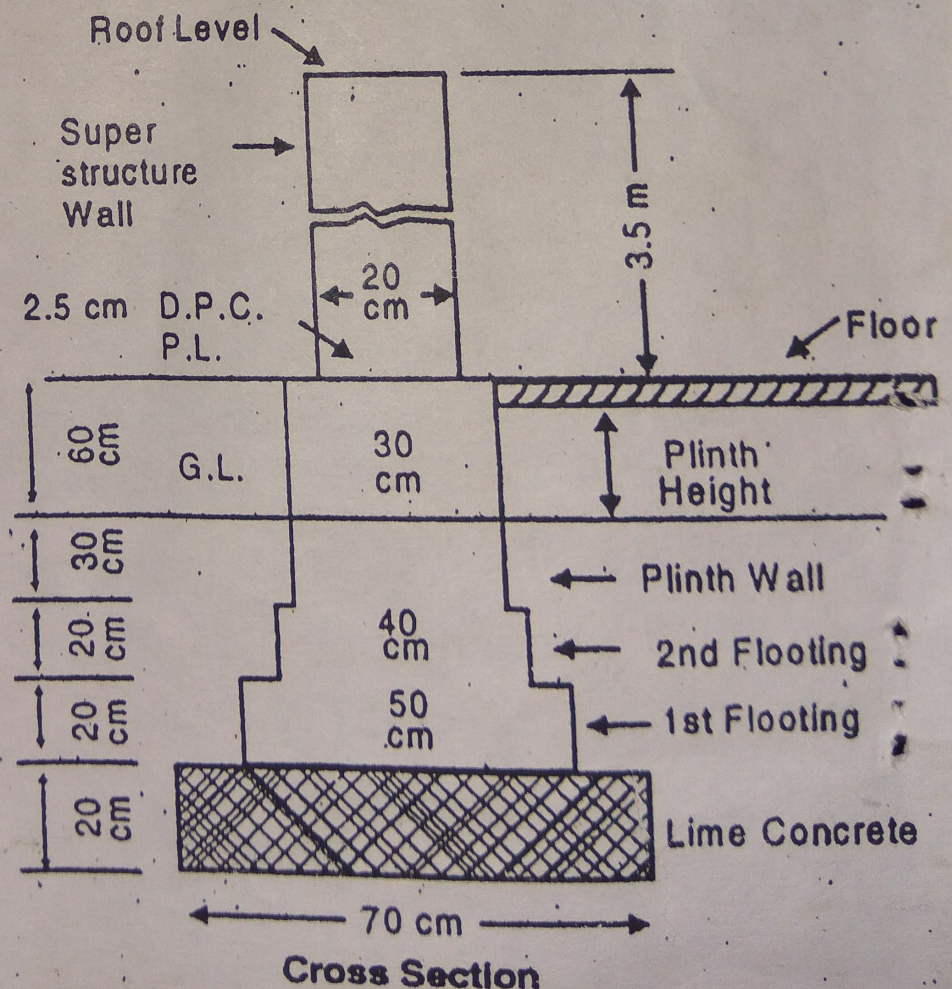
Q.III (a) Write short note on bill of quantities

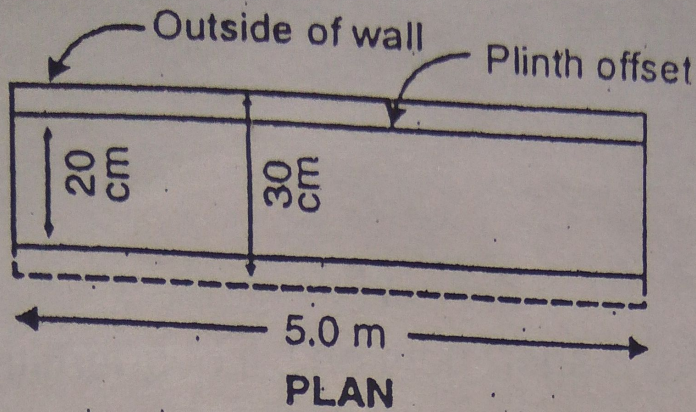
(b) Compare plinth area rate estimate with cubical content rate estimate.

or

Figure shows the plan and cross-section for a wall 5 metre in length. Prepare quantity estimate for the following items—

- Earthwork in excavation in foundation
- Lime concrete (18:36:100) in foundation
- First class brickwork 1:4 in foundation and plinth
- first class brick work 1:6 in super structure wall





- (a) Write down the specifications for RCC work in slab.
- (b) Write down the specification of cement concrete 1:2:4

or

- (a) Estimate the quantity of earth work required for 180 m length of road in a tabular form by using standard prismoidal formula for the following data—

Changes (m)	RL of ground (m)
0	112
30	111.80
60	111.70
90	111.60
120	111.50
150	111.2
180	111.4

RL formation 112 level throughout. The formation width of the road is 10 metre and side slopes are 2:1 (2 horizontal: 1 vertical)

(7)

- (b) What is prismoidal formulae and what are its limitations.

Q.V

Explain in detail—

- (a) Factors affecting cost of work
- (b) Various percentage of different services in building

or

Write the number of labour required for given items of work—any two—

- (a) Earth work per 1000 cu ft
- (b) Cement concrete per 100 cu ft
- (c) Brickwork per 100 cu ft

Q.VI Differentiate between the following—

- (a) Market value and book value
- (b) Depreciation and obsolescence

or

The total cost of a new building is Rs 1.80 lakhs. Calculate the depreciated cost of the building after 15 years by straight line method if the scrap value is Rs 18,000/-. Let the life of the building be 75 years.