



Seventh Semester B.E. Degree Examination, June/July 2018

Estimation and Valuation

Time: 3 hrs.

Max. Marks: 100

Note: 1. PART-A is compulsory.

- 2. Answer any two full questions from PART-B and PART-C each.
- 3. Missing data may be assumed suitably.

PART - A

- The details of residential building is as shown in Fig.Q1. Work out the quantities and cost for the following items of work, by the centre line method.
 - i) Centre line calculation with line diagram.

(06 Marks)

- ii) Earth work excavation for foundation in ordinary soil at Rs. 180/m³.
- (05 Marks) (09 Marks)
- iii) Size stone masonry in CM 1:8 for foundation and basement at Rs.3800/m³.
- iv) First class brick work in super structure in CM 1:6 upto roof slab at Rs.4300/m³
- (09 Marks)
- v) Plastering to inside walls in CM 1:3 with lime rendering at Rs.220/m².

(06 Marks)

vi) Total cost abstract for above items.

(05 Marks)

PART - B

Estimate the detailed quantity of a fully paneled teak wooden door of size 1.2m × 2.10m as shown in Fig.Q2. Also work out the cost of a Honne wood and fastening and fixture required. Use your local prevailing rates. The data given are as under:

Frame = 8×12 cms

Top rails = 10×4.5 cms

Lock rail = 15×4.5 cms

Frieze rail = 10×4.5 cms

Hanging styles = 10×4.5 cms

Bottom rail = 20×4.5 cms.

(15 Marks)

- 3 The details of a manhole is given is Fig.Q3. Find the quantities of the following items.
 - i) Earthwork in excavation for foundation in hard soil.
 - ii) B.B.M in CM 1:4 for walls
 - iii) R.C.C. roof covering slab in CC 1:2;4.
 - iv) Plastering in CM 1:3 for inside walls.

(15 Marks)

- Write the detailed specification for any three of the following items:
 - i) Burnt brick masonry in CM 1:6
 - ii) R.C.C. work in roof slab in CC 1:2:4
 - iii) Plastering in CM 1:3 for inside walls
 - iv) Mangalore tiled roof over sal wood battens.

(15 Marks)

PART - C

- Work out from first principles the analysis of rate for the following any three items:
 - i) Current concrete foundation bed in CC 1:3:6
 - ii) Coursed rubble stone masonry in CM 1:8 for foundation.
 - iii) Damp proof course 25 mm thick in CM 1:3
 - iv) 12 mm thick Cement plastering in CM 1:3.

(15 Marks)



10CV/CT73

Estimate the quantities of earth work from chainage 70 to 76 measured with a standard 20 m chain from the following data. Use mean sectional area method. Side slopes 1:1 in cutting and 2:1 in banking.

Chainage	70	71	72	73	74	75	76
Ground RL's	88.10	87.74	87.80	88.20 90.40	90.75	90.20	89.98
Formation level	88.50	← raising gradient 1 in 100					

Formation width of road is 10 m. Draw the longitudinal section of the proposed road.

(15 Marks)

- 7 Write short notes on:
 - i) Earnest money and security deposit
 - ii) Measurement book and nominal muster roll
 - iii) Administrative approval and technical sanction

(15 Marks)

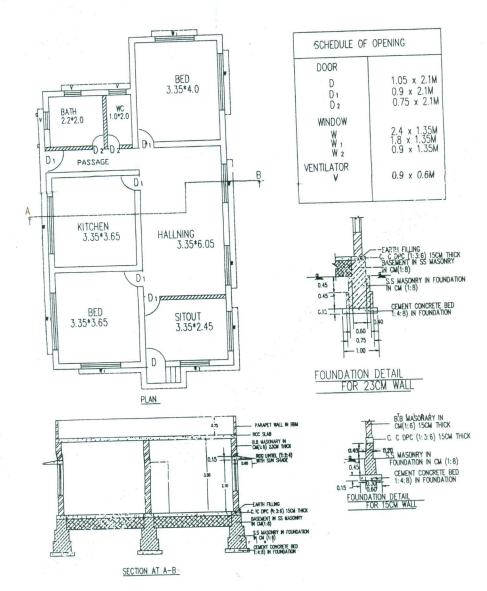


Fig.Q1



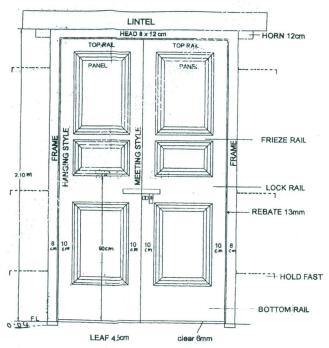


Fig.Q2

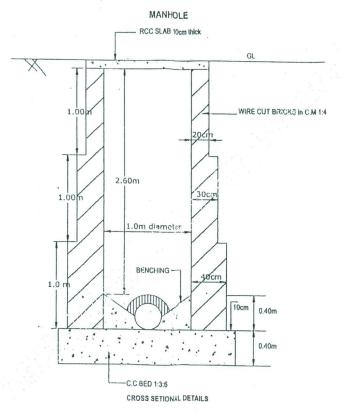


Fig.Q3