

[REVISED COURSE]

4Hours

Total marks : 80

NOTE:.

- i- Question No. 1 is compulsory.
- ii- Attempt any three out of the remaining five questions.
- iii- Figure to the right indicates full marks.
- iv- Assume suitable data if required.

- Q.1 Work out the quantities of following items from given plan & section. (Fig. 01) 20
- a) 12 mm thick Internal plastering in C:M= 1:4
 - b) Brick work (C:M= 1:6) in super structure of ground floor
 - c) Concrete in footings
 - d) F
- Q.2 A). Define rate analysis. Perform rate analysis for Vitriified tile flooring work laid on 25 mm thick base course of cement mortar 1:6 8
- B). What are the points to be observed in framing specification of an item? Explain the legal importance of specification. 8
- C). What are the various sources of rates of items? Prepare the abstract of items of question number 01. 4
- Q.3 A). Prepare an approximate estimate of cost for (G+1) RCC framed Row House, constructed on plot of size 30 feet x 50 feet with FSI=1. Consider cost of construction of super structure = Rs. 800/sqft. Assume other required data. 8
- B). Explain in detail the procedure of submission and opening of tender. 8
- C). Define mass diagram. Explain the use of mass diagram. 4
- Q.4 A). A person purchased a plot measuring 450 sqm at the rate of Rs. 6000 per sqm. Then he constructed a bungalow (on that plot) of built up area 150 sqm, the cost of construction being Rs. 12000 per sqm. Now the owner wishes to let this property (plot and bungalow together) on monthly rental basis. He expects net return of 6% on land cost and 12% on bungalow cost. Considering the outgoings as 30% of the gross income, suggest suitable monthly rent for this property to owner. 8
- B). What is a contract? What are the different types of civil engineering contract? State the suitability of Item rate contract. How does the contractor quote the rate and get payment in item rate contract? 8
- C). Enlist different methods for valuation of land? Explain Belting method of valuation for land with an example. 4

- Q.5 A). Estimate the quantity of earthwork from chainage 20 to 26 measured with a standard 20 m chain from the data, 8

Chainage	20	21	22	23	24	25	26
Ground Level	88.10	87.74	87.80	88.20	90.75	90.20	89.98
				90.40			

The formation level at chainage. 20 is 88.5 and road has a rising gradient of 1 in 100. The formation width of the road is 10 m and side slope in cutting 1:1 and banking 2:1.

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B). Work out the quantities of reinforcement in footings and columns of question no.0.1
Steel in footing -F1(10Ø @ 150 mm c/c both ways), F2 (10Ø @ 150 mm c/c both ways),
Steel in Columns- C1 (main bars 4- 12 Ø, Links 8Ø @ 200 mm c/c throughout), C2 (main
bars 6- 16 Ø, Links 8Ø @ 200 mm c/c throughout)
C). Work out the quantities of different materials in slab (M20) of question no. 01

Q.6 4 Write short notes on (any five)
a.- Lease hold and free hold property
b.-Time extension clause of contract
c.-BBS

d.-Rules for deduction in masonry work as per IS-1200
e.- Administrative approval
f.-CBRI equations

