

19/12/15

QP Code : 2364

[ OLD COURSE ]

4Hours

Total marks : 100

NOTE:.

- i - Question No. 1 is compulsory.
- ii - Attempt any four out of the remaining six 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) Earth work in excavation for foundation
  - b) Brick work in super structure of ground floor
  - c) Flooring and skirting
  - d) 12 mm thick Internal plastering in C:M 1:5
- Q.2 A) State the purpose of rate analysis. Prepare rate analysis for 12 mm thick internal plaster work in C:M 1:4. 10
- B) Draft the detail specification for first class brick work. 10
- Q.3 A) Prepare an approximate estimate of cost for (G+3) RCC frame structure building with four flats per floor, each of 700 sqm. carpet area, in a sub-urban area. Assume cost of construction of super structure as Rs.8000 / sqm. 10
- B) What are the circumstances under which the lowest tender and all tenders are rejected? 10
- Q.4 A) Explain (i) importance of mass diagram (ii) role of Quantity surveyor in construction industry. 10
- B) The owner of a building gets a net annual rent of Rs. 3500. The future life of the building is estimated 12 years. But if recommended repairs are carried out immediately at an estimated cost of Rs. 30,000, it is expected to last for at least 30 years. Assuming the rate of interest as 8%, determine whether it is economical to carry out the recommended repairs to the building or leave it as it is. 10
- Q.5 A) Determine the quantities of earthwork for the portion of a road between chainages 50 and 60 from the following data, length being measured with a standard 20 m chain:- 10
- | chain age | 50    | 51    | 52    | 53    | 54    | 55    | 56    | 57    | 58    | 59    |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| G.L.      | 131.1 | 131.2 | 130.9 | 131.2 | 130.8 | 130.7 | 130.6 | 130.4 | 129.1 | 129.5 |
- The formation level at chainage 50 is 130.0 and the road is in a rising gradient of 1 in 200. The width of formation is 10 m and side slope is 1.5:1 in embankment and 1:1 in cutting, the lateral slope of the ground may be assumed as level. Calculate also the cost of this earthwork in bank and cutting. Assume suitable rates and also draw the mass diagram. 10
- B) What is contract? What are the different types of civil engineering contract? Write in detail about BOT contract. 10
- Q.6 A) What are different methods for valuation of land? Explain Belting method of valuation for land with an example. 10

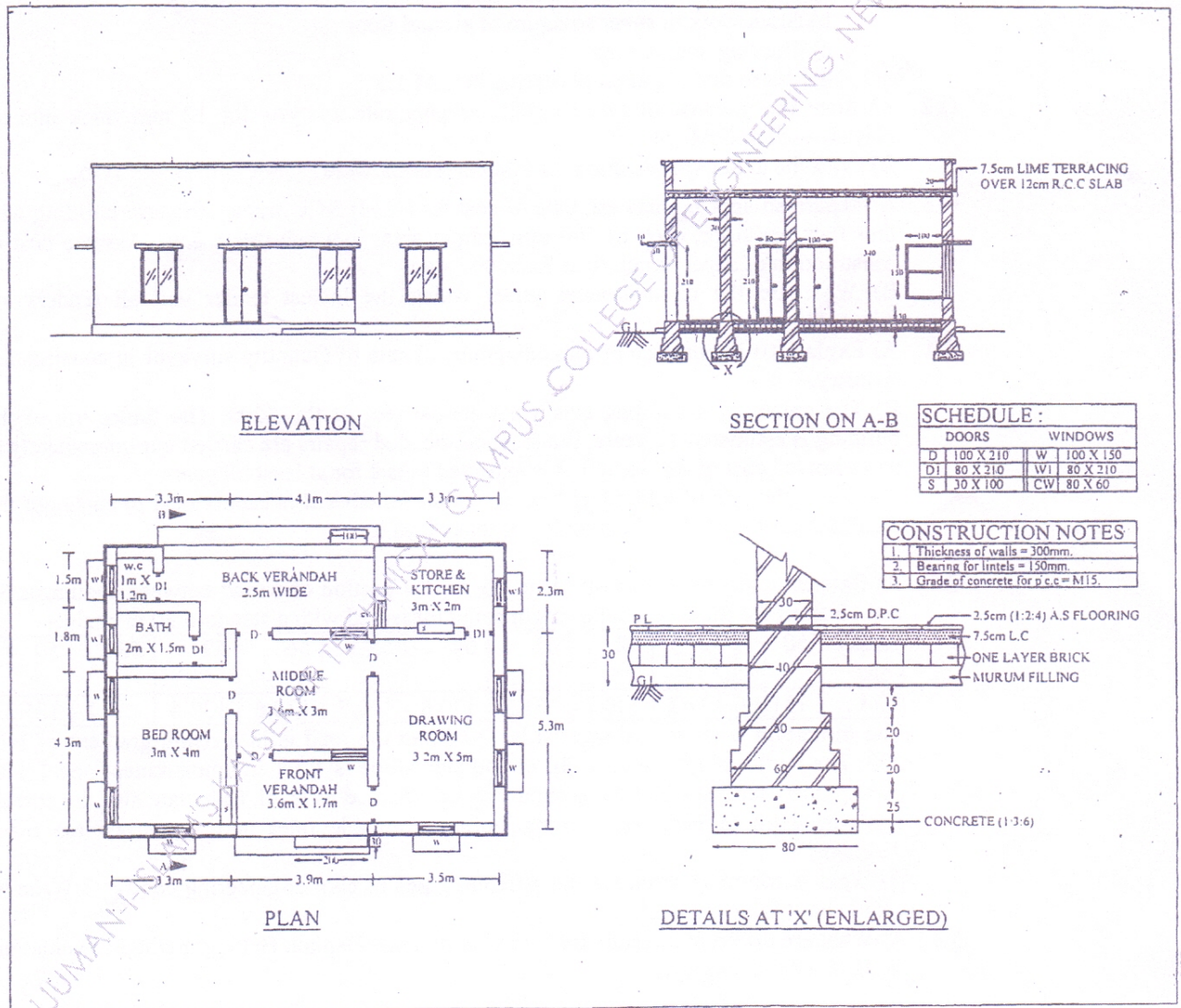
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B) Work out the quantities of different materials (cement, sand, aggregate and steel) in a 7.0 m long beam of size 300 x 700 mm overall. Bottom bar: 4-20 dia out of which two bar are bent up, anchor bar: 2-12 dia, stirrups 8 dia. @ 200 c/c throughout the length of beam. Grade of concrete is M20.

- Q.7 2 Write short notes on (any four)
- a- Price escalation clause of contract
  - b- BBS
  - c- Work charged establishment
  - d- Breach of contract
  - e- Unbalanced tender



**SCHEDULE :**

DOORS		WINDOWS	
D	100 X 210	W	100 X 130
DI	80 X 210	WI	80 X 210
S	30 X 100	CW	80 X 60

**CONSTRUCTION NOTES**

1. Thickness of walls = 300mm.
2. Bearing for lintels = 150mm.
3. Grade of concrete for p.c.e = M15.