

BE / SEM - VII / CBGS / CIVIL

QP CODE : 39781

(4 Hours)

[Total marks : 80]



13 MAY 2019

NOTE:.

- Question No. 1 is compulsory.
- Attempt any three out of the remaining five questions.
- Figures to the right indicate full marks
- Assume suitable data if required and mention it.

- Q.1 Work out the following quantities from given plan & section. (Fig.01) 20
- Concrete (M20) in super structure
 - Internal plaster in c:m 1:4, 12 mm thick.
 - Brick work in c:m 1:5
 - Flooring and skirting
- Q.2 A) Prepare an approximate estimate of the RCC Bungalow with carpet area of 300 sqm. Assume cost of construction of super structure as Rs.8000 / sqm. Assume other necessary required data. 10
- B) What is price escalation clause? Explain it with an example. 05
- C) Draft a typical tender notice for construction of School building in a city area. The work is estimated to cost Rs. 15 crores, to be completed in 18 months. 05
- Q.3 A) Explain factors affecting Task i.e. output of a labour with an example. Perform rate analysis for UCR masonry work in cement mortar 1:6. 10
- B) Define specification. What are the principles of writing a good specification. 10
- Q.4 A) Explain the hook and 90 degree bend allowance for Fe 415 steel. Work out the quantity of materials sand, cement, aggregate, steel and form work in Column of size 300 x 400 mm and height of 3.3m. Main steel 6-16#, Link of 8# @ 200 c/c. 10
- B) A plot of land cost Rs. 40 lacs. The cost of construction of building on the plot including all installation is Rs. 20 lacs. 10
- Allowing a net return of 10 % on the cost of construction and 7% on cost of land, workout the standard rent of the property from the following data:-
- i. Sinking fund @ 6.5% for the future life of 60 years.
 - ii. Annual maintenance @ 0.5% of cost of construction.
 - iii. Other outgoings @ 25% of gross rent.
- Q.5 A) Estimate the quantity of earthwork for a portion of a proposed road from the following data. 10

Dist. in m	0	60	120	180	240	300	360	420	480	540
GL	73.12	72.44	71.86	72.08	71.3	70.8	70.54	70.82	70.96	71.50
FL	72.42	Downward gradient 0.8%				Upward gradient 0.5%				

Proposed formation width of road is 10 m, side slope 1.5:1 in cutting and 2:1 in banking.

- B) List out types of contract and explain any one with its advantages and disadvantages and 8

suitability.

Q.6 Write short notes on (any four)

- Mass haul diagram
- Liquidated damage clause
- IS: 1200
- Price variation clause
- Arbitration
- Mass haul diagram

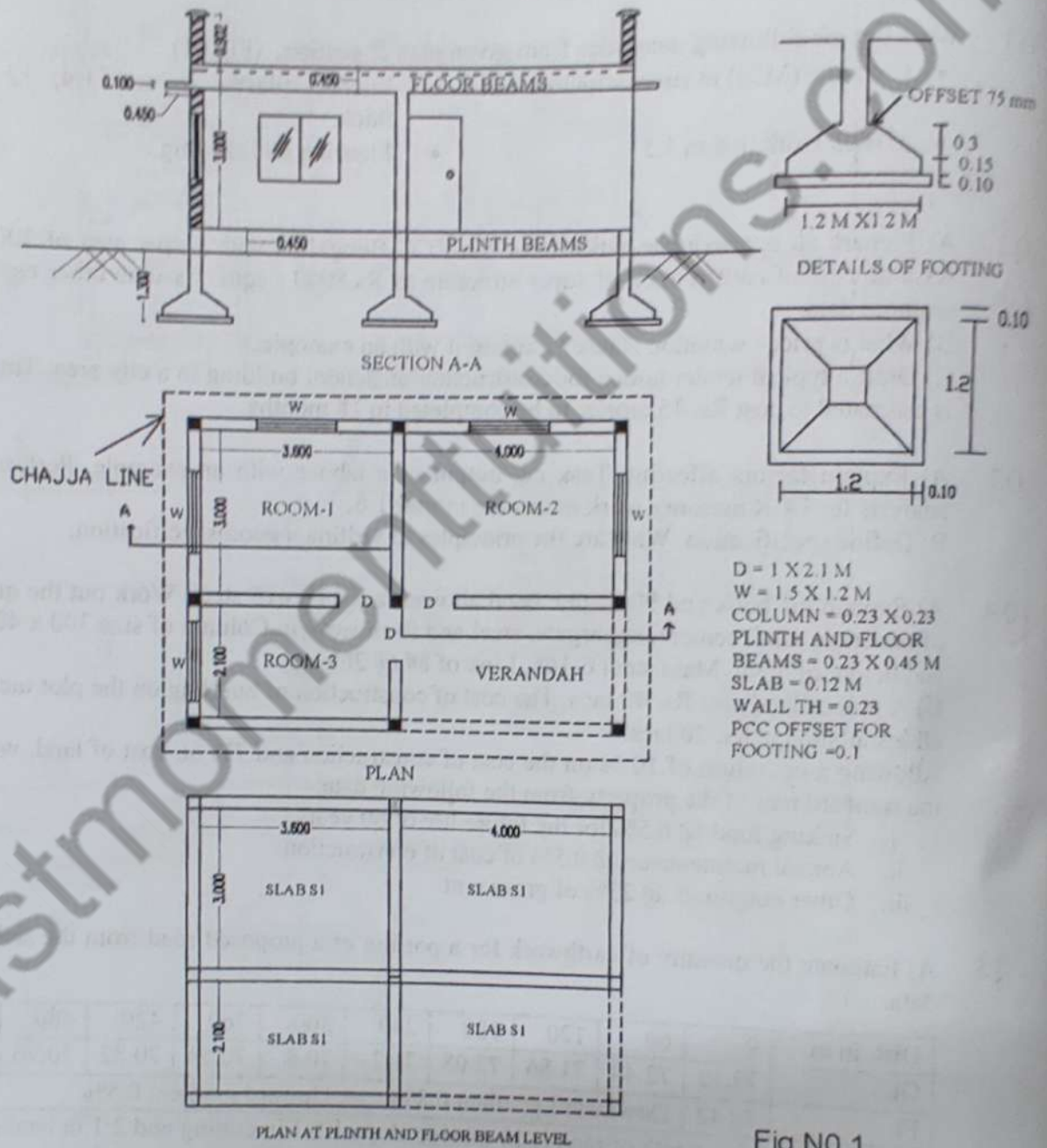


Fig NO.1