Total No. of Questions :6]

SEAT No. :

P2161

[Total No. of Pages : 4

BE/Insem./APR-502
B.E. (Civil)
401008 : QUANTITY SURVEYING CONTRACTS AND TENDERS
(2015 Pattern) (Semester - II)

Time : 1 Hour] *[Max. Marks : 30*

Instructions to the candidates:

1) ***Answer Q.No. 1 or Q.No. 2, Q.No. 3 or Q.No. 4 and Q.No. 5 or Q.No. 6.***
2) ***Figures to the right indicate full marks.***
3) ***Use of logarithmic table, slide rule, Mollier chart, electronic calculator permitted.***
4) ***Assume suitable data, if necessary.***

Q1) a) Estimation is necessary for all types of construction activity, Justify. What are the prerequisites of a good estimator? **[3]**

b) Prime Cost and provisional sum are necessary in construction activity, justify with suitable example. **[3]**

c) Explain in detail the deductions for : **[4]**

i) Brickwork.

ii) Plastering as per IS 1200.

OR

Q2) a) Differentiate between Approximate estimate and detailed estimate and explain any one method of approximate estimate. **[3]**

b) In view of knowing the feasibility for constructing a school building, as an Engineer how would you recommend the approximate cost of the building with the following data. **[4]**

i) Number of students 450.

ii) Plinth area per student 1.80 sqm.

iii) Plinth area rate - Rs. 2,750/sqm of plinth area.

iv) Water supply and sanitary installation - 10% of cost of building.

v) Electrification charges - 10% of cost of building.

vi) Work charge establishment & Contingencies - 8% of cost of building.

vii) Provision of architectural finishes - 3.5% of cost of building.

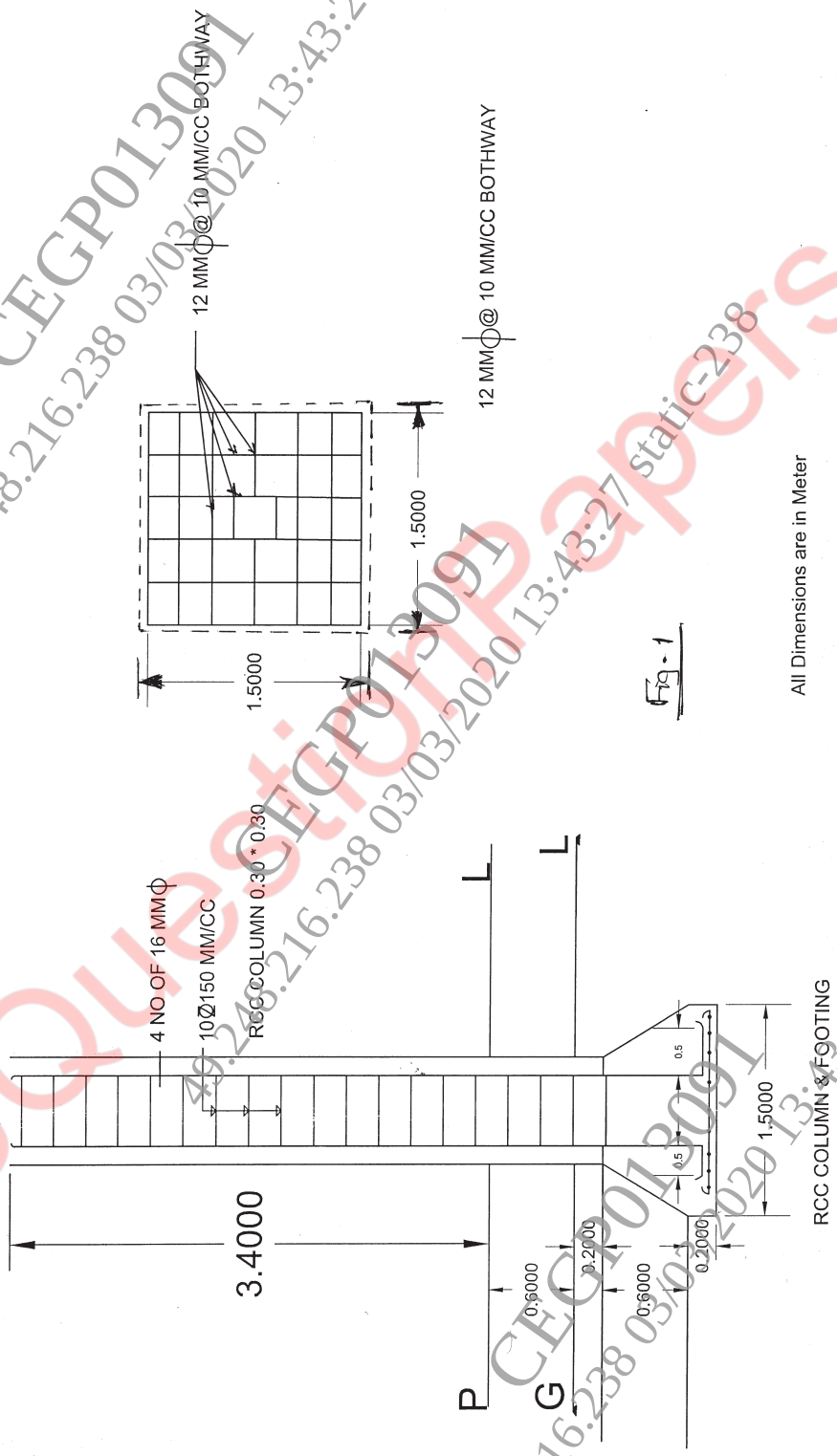
c) Explain the booking of measurement of quantities through Measurement Form and Abstract Form, for a detailed estimate. **[3]**

P.T.O.

Q3) Fig. 1 shows the plan and cross section of the footing and 30 cm square column. Prepare a detailed estimate for **[10]**

a) CC in footing.

b) RCC column and foundation footing.



OR

Q4) Prepare a detailed estimate for the RCC roof slab with a clear span of 3.5m and length of 7 m as shown in Fig. 2. Following details may be assumed : **[10]**

a) Depth of RCC roof slab 15 cms.

b) Top and bottom cover 2.5 cm.

c) Side cover 5 cm.

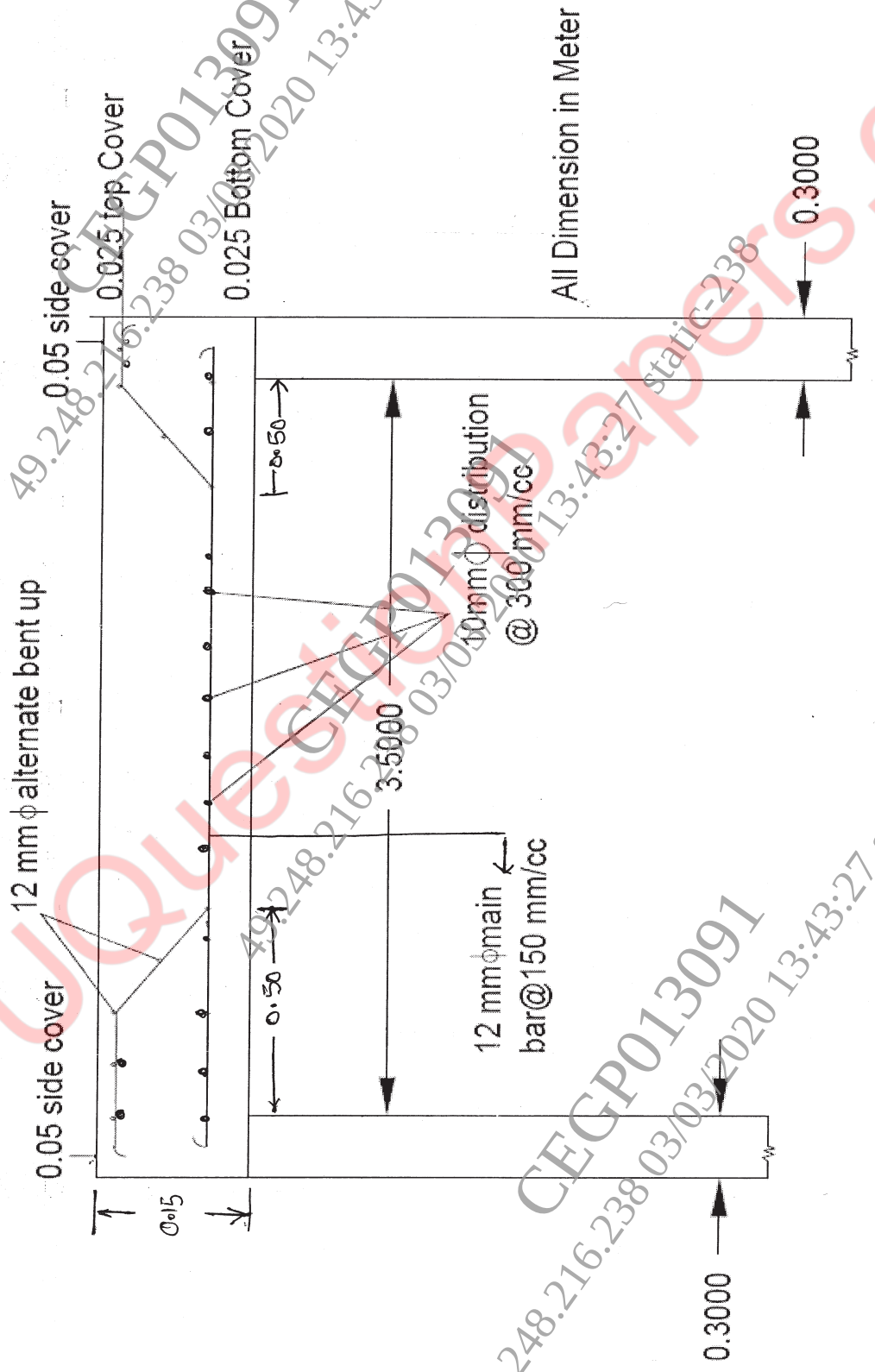


Fig 2

Q5) a) Specification is a necessary document for Civil Engineering works, explain. Discuss briefly : **[5]**

i) Specification for material and workmanship.

ii) Restricted specification.

b) Workout the unit rate of I class brickwork in super structure with standard brick in cement mortar 1 : 6. Assume local/suitable rate as applicable. **[5]**

OR

Q6) a) Draft a detailed specification for cement concrete. **[5]**

b) What are the different types of specification? Differentiate between General overhead and job overhead with suitable examples. **[5]**