Total No. of Questions	[6:
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## P2161

## 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:

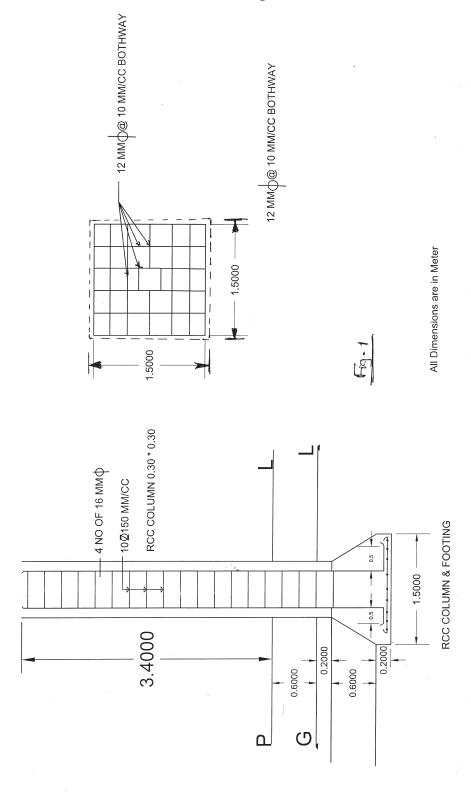
- 1) Answer Q.No. 1 or Q.No. 2, Q.No. 3 or Q.No. 4 and Q.No. 5 or Q.No. 6.
- 2) Figures to the right indicate full marks.
- 3) Use of logarithmic table, slide rule, Mollier chart, electronic calculator permitted.
- 4) Assume suitable data, if necessary.
- Q1) a) Estimation is necessary for all types 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]

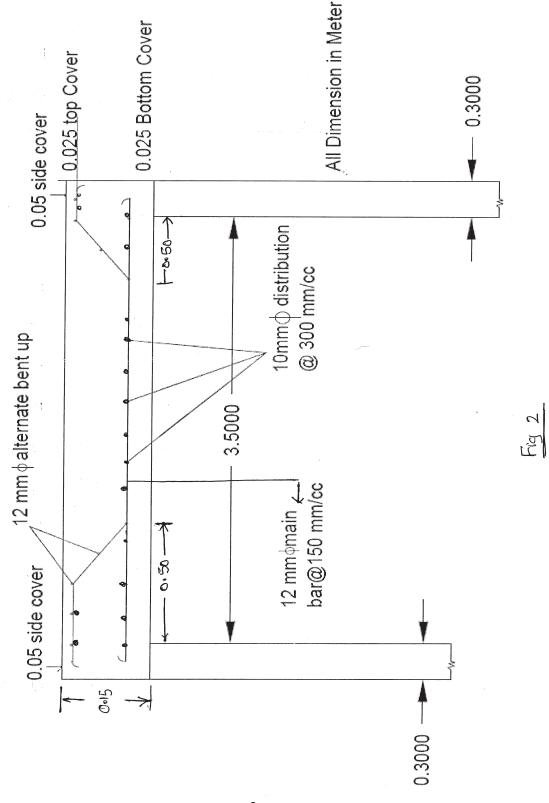
*P.T.O.* 

- 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 2

- **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.



BE/Insem.-502

- **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]

