

Total No. of Questions : 12]

SEAT No. :

P3719

[5561]-115

[Total No. of Pages : 5

B.E. (Civil)

**QUANTITY SURVEYING CONTRACTS AND TENDERS
(2012 Pattern) (Semester-II) (401008)**

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Solve Q.No.1 or 2, 3 or 4, 5 or 6, 7 or 8, 9 or 10, 11 or 12.*
- 2) *Figures to the right indicate full marks.*
- 3) *Draw neat diagram wherever necessary.*
- 4) *Use of logarithmic table, slide rule and electronic pocket calculator are allowed.*
- 5) *Assume suitable data if necessary, stating it clearly.*

- Q1) a)** A housing project is to be taken up. Explain the role of estimation and quantity surveying that helps in working out feasibility of the project. **[4]**
- b) Explain the principle of long wall and short wall method of estimation of a building and compare it with centre line method. **[2]**

OR

- Q2) a)** Why is degree of accuracy required in estimation? What is the degree of accuracy required in the measurement of length, area and volume. **[4]**
- b) What information or data is available in DSR and SSR. **[2]**
- Q3) a)** What are the advantages of Preliminary Estimate? What are the type of approximate estimate prepared in the following case. **[4]**
- i) Bridge of 4 span
 - ii) Factory shed
 - iii) Approximate Estimation considering total length of wall in running metre.
- b) Explain centage or departmental charges. **[2]**

OR

P.T.O.

Q4) a) Enlist the various methods of estimation. [2]

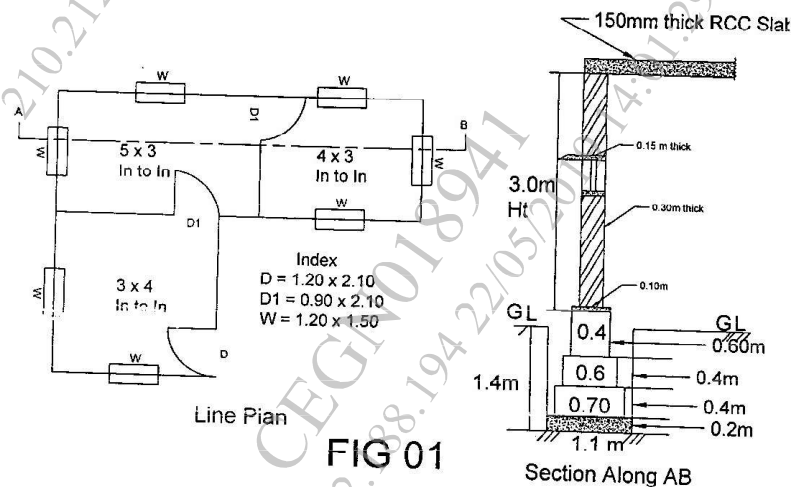
b) Estimate the quantity of wood required for a door opening of $2.1\text{m} \times 0.9\text{m}$ with a bearing of 10cm . The frame is of $10\text{ cm} \times 7.5\text{ cm}$ and shutter is 2.5 cm thick. [4]

Q5) a) Estimate the following items of works from the fig.1 by using long wall and short wall method.

i) Foundation cement $1:3:6$ [2]

ii) First class brick work in super structure. [4]

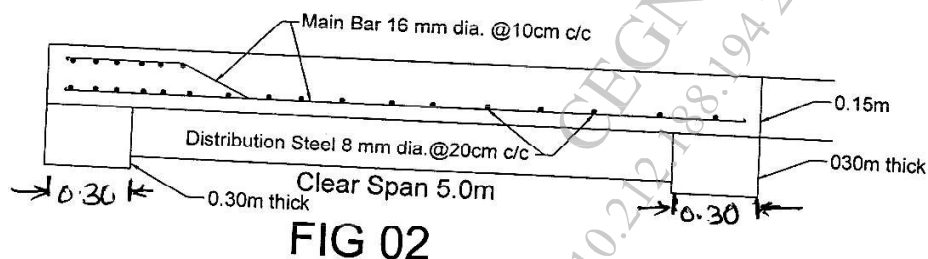
iii) 12 mm internal plastering in CM $1:6$ [2]



Note:- All Dimensions in metre
All walls 30cm thick.

OR

Q6) a) Prepare the bar bending schedule for the roof slab and find out the quantity of steel required for the RCC slab shown in Fig.2. [4]



- b) What are the different methods of valuation. Explain in detail the rental method of valuation and what are the various outgoings that are considered in rental method of valuation. [4]

Q7) a) As a party applying for a tender, explain the role of rate analysis and factors affecting the rates in preparing the tender. Will lead and lift have any effect on the rate of item of work, explain. [6]

- b) Workout the unit rate for the following finished items required for a building, RCC work in CC 1:2:3 in slab and beam. [8]

The following rates of materials and labour at the site.

- i) Cement Rs. 300/- per bag
 - ii) Sand Rs. 2100/- per cu.m.
 - iii) Aggregate Rs. 750/- per cu.m.
 - iv) Standard bricks Rs. 7,500/- per 1000 No's
 - v) Steel Rs. 50,000/- per tonne
 - vi) Man Mazdoor Rs. 250/- per day
 - vii) Bar bender Rs. 500/- per day
 - viii) Carpenter Rs.600/- day
- c) Under what context the term Deprecation and obsolescence are used, and what are the main difference between. Give example of each. [4]

OR

Q8) a) Distinguish between the general specifications and detailed specifications. Write the general specification for First class building. [6]

- b) What are the necessity and types of specification? What is meant by overhead and its different types? How does contingency differ from overhead? [6]

- c) Draft a detailed specification for Damp Proof Course in Cement concrete 1:2:4. [6]

Q9) a) What is e-tendering? Compare the difference between Manual tender and e-tender. What are the advantages of e tendering. [6]

b) What is pre bid meeting why it is necessary? Explain in detail of submission and opening of tender. [4]

c) Explain the classification of PWD works under [6]

i) Nature of work and

ii) According to cost of work.

Discuss the suitability of piece work agreement and procedure for terminating piece work agreement.

OR

Q10)a) Define contract and agreement. State the suitability of piece work agreement contract. Draw a piece work agreement form showing all details. [6]

b) What are the types of penalties that are imposed on a contract and why are they imposed? [4]

c) Briefly explain [6]

i) Rights of contractor &

ii) Relationship between owner, contractor and Engineer.

Q11)a) What is a contract document and what are the essential details it should contain? What are the duties and liabilities of contractor? [6]

b) Draft a tender notice to execute the construction work of a concrete road on a National Highway. The estimated cost of construction 1.5 crore. The work is required to be completed in one year. [6]

c) Explain [4]

i) Informal tender,

ii) Conditions for rejection of tender.

OR

Q12)a) What is Arbitration and its necessity in construction field? Explain. **[8]**

- i) Institutional arbitration
- ii) Adhoc arbitration
- iii) Fast track arbitration

b) Explain briefly any two of the following **[8]**

- i) EMD & Security deposit
- ii) Liquidated damages and unliquidated damages.
- iii) Valid and void contract
- iv) Leasehold and freehold property.

