

Roll No. ....

**2523**

**B. Tech. 7th Semester (Civil Engg.)**

**Examination – December, 2011**

**ESTIMATING & COSTING**

**Paper : CE- 405-E**

***Time : Three hours ]***

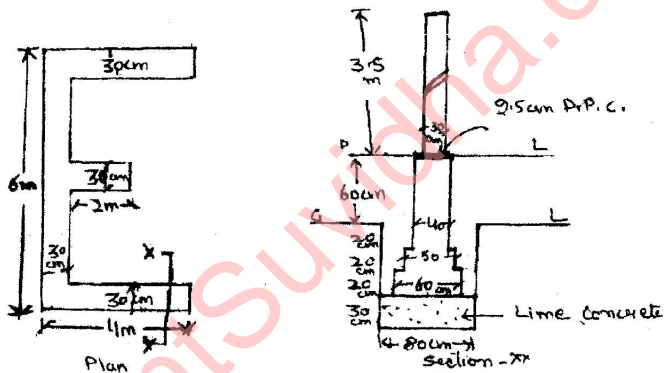
***[ Maximum Marks : 100***

*Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

**Note :** Attempt any *five* questions. Each question carries equal marks.

1. (a) What is the principle of estimation ? Classify the various kinds of estimates with examples. 10
- (b) Prepare a detailed estimate of the building from the given plan and section and general specifications given as : 10
- (i) Foundation concrete shall be of lime concrete.

- (ii) Foundation and plinth shall be of 1<sup>st</sup> class brickwork in lime mortar.
- (iii) Damp proof course – 2.5 mm c/c 1 : 1½ : 3
- (iv) Superstructure – 1<sup>st</sup> Class B.W in lime mortar
- (v) Wall finishing – In side wall 12mm cement plastered 1 : 6 and white washed 3 coats.



2. (a) What are the various methods of estimation ?  
Compare them with respect to their utility. 10
- (b) What do you understand by items of works.  
Explain the units required to measure them. (any five). 10
3. (a) What is the necessity of specification ? What is the difference between General specifications and detailed specifications ? 10

- (b) Give the specifications for : 10
- (i) R.C.C.
  - (ii) Earth work
  - (iii) Painting
  - (iv) Flooring
4. What are the specifications of buildings ? Give the specifications for 1<sup>st</sup> class 2<sup>nd</sup> Class and 3<sup>rd</sup> class buildings. 20
5. (a) Give the purpose, importance and requirements of rate analysis. What is the contribution of estimation in rate analysis ? 10
- (b) Calculate the rate for a 20m length, 5m Height and 30cm nominal thickness ( $1\frac{1}{2}$  brick thick) wall. 10
6. Write the procedure of rate analysis for : 20
- (i) Earth work
  - (ii) Concrete works
  - (iii) Finishing (white washing, distempering)
  - (iv) Reinforced brick work.
7. (a) What do you understand by tender ? What are the various features essential for a tender ? 10
- (b) What is the purpose of maintaining muster roll ? How is pay bill prepared using muster, roll ? 10

8. Write short notes on :

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- (i) Earnest money
  - (ii) First and final bill
  - (iii) Administrative sanction
  - (iv) Cash Book
  - (v) Security Money.
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