

## B.E / B.Tech ( Part Time ) DEGREE END SEMESTER EXAMINATIONS, NOV / DEC 2013

#### **CIVIL ENGINEERING**

#### VI Semester

### PTCE 431/472/9404 Estimation, Costing and Valuation Engineering

(Regulation 2002, 2005, 2009)

Time: 3 Hours

**Answer ALL Questions** 

Max. Marks 100

### PART-A ( $10 \times 2 = 20 \text{ Marks}$ )

- 1. Enumerate the need for estimation
- 2. Define approximate estimate
- 3. List the softwares used for estimation
- 4. Define rate analysis
- 5. Enumerate the uses of specification
- 6. Explain digital signature certificate
- 7. List the types of contracts
- 8. Write a note on penalty for time overshoot of a project
- 9. Enumerate the need for valuation of property
- 10. Compare market value and guideline value

# $Part - B (5 \times 16 = 80 \text{ marks})$

11. Estimate the following items for the plan and section given in Fig 11

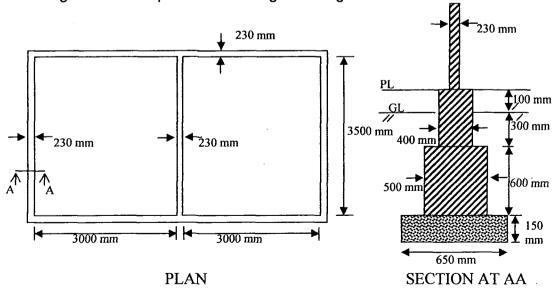


Fig. 11

- (i) Earthwork for excavation
- (ii) Plain cement concrete for foundation
- (iii) I class brickwork for foundation
- (iv) Concrete for roof slab (thickness of slab = 100 mm)
- 12. a) Explain the factors affecting the cost of a project. Discuss schedule of rates

(OR)

- b) Explain standard data and the assessment of man hours, materials and machinery for common civil works with an example.
- 13. a) List the types of specification and explain each type in detail.

(OR)

- b) Explain the process of tender opening and tender evaluation according to Tamilnadu Transparency in Tenders Act 2000
- 14. a) Write notes on (i) Earnest money deposit (ii) Security Deposit (iii) Mobilization advance (iv) Price variation clause

(OR)

- b) Explain in detail arbitration and legal requirements of a contract.
- 15. a) Explain any two methods of calculating depreciation of property with examples (OR)
  - b) Write notes on the following factors
    - (i) Compound interest factor
    - (ii) Discount factors
    - (iii) Rental method of valuation
    - (iv) Valuation based on cost