### **Unit III**

- 5. What is the procedure of doing Rate analysis in a construction project? Explain the process of doing rate analysis of Concreting and Excavation.
- 6. Explain the tendering process of awarding tender to contractor. What are the advantages and disadvantages of using each type of contract?

### **Unit IV**

- 7. Explain the process of arbitration used in construction projects. What are the qualifications of an arbitrator and how are the arbitrators selected for a project?

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- 8. Explain the process of preparation of Feasibility report of construction projects. Why is it beneficial to prepare feasibility report for project?

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## B. Tech. EXAMINATION, Dec. 2017

(Seventh Semester)

(B. Scheme) (Main & Re-appear)

(CE)

CE-407-B

### ESTIMATING AND COSTING

Time: 3 Hours [Maximum Marks: 75

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

**Note**: Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks. Assume any data if necessary.

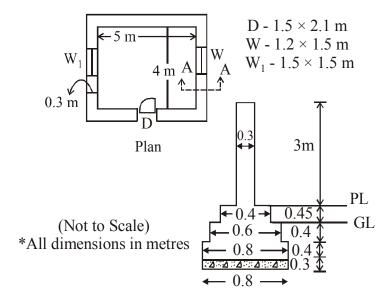
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P.T.O.

### Unit I

- 1. Figure below shows a plan of a single room building 5 m × 4 m. Estimate the quantities and cost of following items using centre line method:
  - (a) Earthwork in excavation @ Rs. 3,000/cum
  - (b) Concrete in foundation @ Rs. 4,000/cum
  - (c) Brick work in foundation and plinth @ Rs. 2,000/cum
  - (d) Brick work in superstructure @ Rs. 3,000/cum.



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- 2. Explain following methods for calculating the quantity of earthwork:

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  - (a) Mid-sectional Area Method
  - (b) Mean sectional Area Method.

### **Unit II**

**3.** Explain the term specifications used in buildings. Explain the General specifications of all components used in first class building.

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- 4. Write detailed specifiations on any *three* of the following items:
  - (a) Plain cement concrete in Foundation
  - (b) Reinforced cement concrete in beam 1:1.5:3
  - (c) Damp proof course at plinth level 2.5 cm thick c.c. 1:1.5:3
  - (d) First class brick work
  - (e) Centering and Shuttering.

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P.T.O.