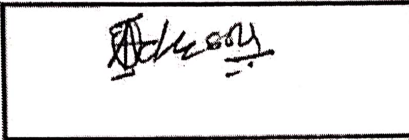




**FACULTY OF ENGINEERING**  
**DEPARTMENT OF CIVIL ENGINEERING**  
**FIRST SEMESTER EXAMINATION (MARCH**  
**2018)**  
**2017/2018 ACADEMIC SESSION**

  
**HOD'S SIGNATURE**

**Instructions:**

- 1) Attempt any THREE questions in Section A and Q5 in Section B
- 2) **Time Allowed:** 2.5 Hours
- 3) **SEVERE PENALTIES APPLY FOR MISCONDUCT, CHEATING, POSSESSION OF UNAUTHORIZED MATERIALS DURING EXAMINATION**

**Course Title:** CIVIL ENGINEERING MEASUREMENTS and EVALUATION

**Course Code:** CVE 511



**ELIZADE UNIVERSITY, ILARA-MOKIN**  
**FACULTY OF ENGINEERING**  
**DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING**  
**FIRST SEMESTER 2017/2018 EXAMINATION**  
**CVE 511: CIVIL ENGINEERING MEASUREMENTS and EVALUATION**

**INSTRUCTIONS:** Attempt any THREE questions in Section A and Q5 in Section B.

**TIME ALLOWED:** 2.5 Hours.

**SECTION A**

**Question 1 (15 marks)**

- a) What is Bill of Quantities and enumerate its importance.
- b) Explain the following terminologies:
  - i. Preliminaries.
  - ii. Measured Works.
  - iii. Provisional Sums.

**Question 2 (15 marks)**

- a) Explain the term "Specification".
- b) Explain the different types of specification you know.

**Question 3 (15 marks)**

- a) Explain the functions of cost estimators and cost estimates.
  - b) Enumerate the Professional Behavior Expected of the Cost Estimator
- 
- a) What is "Contract" in civil engineering works?
  - b) Explain the following types of contract and give advantages and disadvantages where necessary.

## SECTION B

- a) Considering Table Q5a and Figure Q5b, it is required to prepare a quantity take-off for the following types of work to be included on the bill of quantities:
- i. Clearing of site
  - ii. Over site excavation: The site is required to be reduced to a level of 35.72.
  - iii. Excavation.
  - iv. Plain concrete footing
  - v. Reinforced concrete ground beam

**Note:** Provide a clearance of 2 m round the building site. Column height of 1.5 m.

**Information about the site are as follows:**

- a) The site is made up of undergrowth / bushes / shrubs;
- b) The site is made up of trees of girth measured at 1.00 m from the ground: (a) tree not exceeding (NE) 300mm girth – 2 Nos.; (b) Exceeding 300mm and not exceeding 600 mm girth – 1 No.
- c) The grid survey is given in Table Q5a
- d) Concrete is of mix ratio 1:1 ½ :3

**Table Q5a: Grid survey of the proposed site**

35.90	35.86	35.89	35.92	35.90	35.89
35.86	35.84	35.88	35.90	35.90	35.86
35.84	35.85	35.87	35.90	35.88	35.78

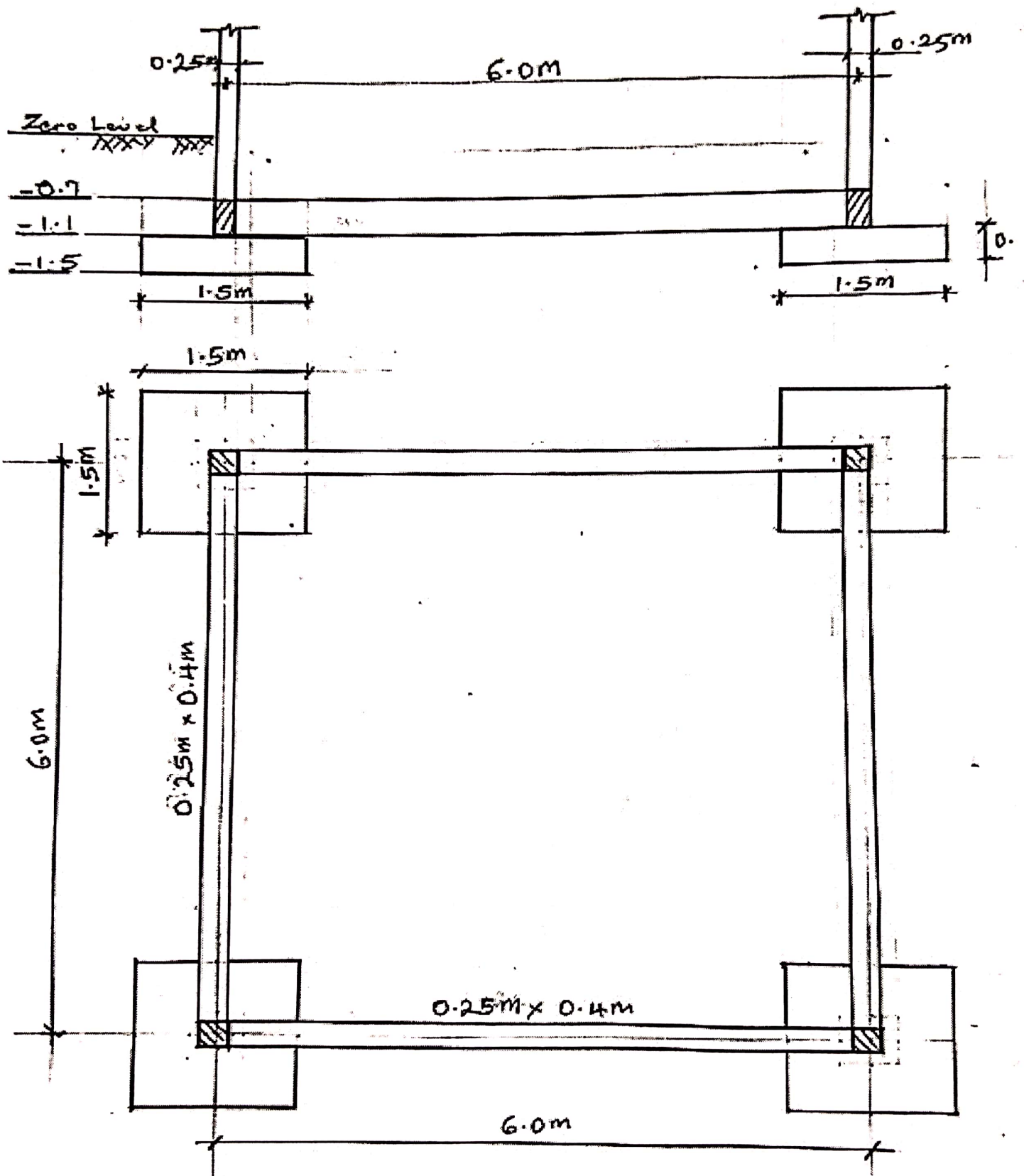


Figure Q5b: Foundation plan of proposed building