` Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.ARCH. - SEMESTER–VI EXAMINATION – WINTER 2015

Subject Code: 1065005 Date:07/12/2015

Subject Name: Estimating & Costing

Time: 02:30pm to 4:30pm Total Marks: 50

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1 **(a)** Write down in detail purpose of Rate Analysis and Factor affecting rate Analysis. **06**

(b) Write down details specification of first class brick work in cement mortar. (1:6) for superstructure. **04**

Q.2 **(a)** Write down methods of preparing approximate estimate. **05**

(b) Enlist the Data required for preparing and estimate. **05**

Q.3 **(a)** Draft a tender for repair of windows and doors of military hospital having a cost of 125 lakhs fees of tender is 10,000. Last date of tender is 10th May 2015. **07**

(b) Calculate the following: **08**

1. Number of bricks required in 1 cum brickwork.
2. Quantity of sand for 1 cum P.C.C. cements mortar 1:1.5:3.

Or

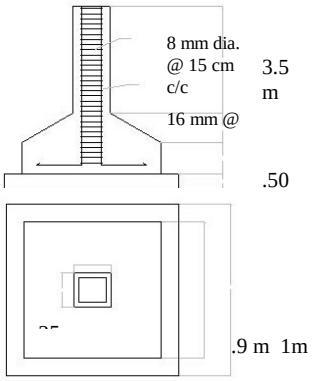
Q.3 **(a)** Find the quantity and rate analysis for 100 m^2 area and 12 mm thick plaster (1:4). **07**

(b) Define the following: (any two) **04**

1. Tender fees
2. Ernest money deposit
3. Security deposit

(c) Explain the term specification. State the importance of it. **04**

Q.4 A Reinforced Cement concrete column in shown in figure. Calculate the quality of the following items. **15**

1. 1:2:4 cement concrete of column and footing.
2. Sand aggregate for 1:2:4 Concrete.
3. Form work for column and footing.
4. No. of cement bags 1:2:4 R.C.C.
5. Steel for column and footing in kg.

Weight of steel
12mm dia. = 0.9 kg/m
08mm dia. = 0.4