

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.ARCH. - SEMESTER-VI EXAMINATION – SUMMER 2019

Subject Code:1065005

Date:18/05/2019

Subject Name: Estimating & Costing

Time:02:30 PM TO 04:30 PM

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) Differentiate between brief specifications & detailed specifications. **05**
(b) Define rate analysis and write purpose of rate analysis. **05**
- Q.2** (a) Explain methods for building estimates and explain any one in detail. **06**
(b) What is the significance of market survey? How the rate of an item is derived by method of rate analysis? **04**
- OR
- (b) Define the term: 1. Tender fees 2. Earnest money deposit 3. Surface excavation, 4. Security deposit **04**
- Q.3** **Fig.1** shows the details of RCC beam. Calculate the following quantities. **10**
A, Total quantity of steel bars
B, Quantity of form work
C, Number of cement bag required
D, Quantity of concrete work
- OR
- Q.3** The **Fig.2** shows details of a residential building. Calculate the quantities of the following items. **10**
A, Earthwork in excavation for foundation
B, Brick masonry up to plinth in c.m. 1:6.
C, Smooth plaster inside the rooms and ceilings in c.m. 1:3.
- Q.4** (a) Which IS code is referred for the various measurements? Write the deduction rules for plastering. **05**
(b) Give accuracy criteria for length, area and volume. **05**
- OR
- (b) Find the rate of Plain cement concrete (1:1.5:3) per cu.m. by rate analysis. Assume suitable rates of material and labour. **05**
- Q.5** (a) Explain factors affecting rate analysis. **05**
(b) Which type of data are required for the estimation ? Write in details. **05**
- OR
- (b) Explain the centreline method with suitable example. **05**

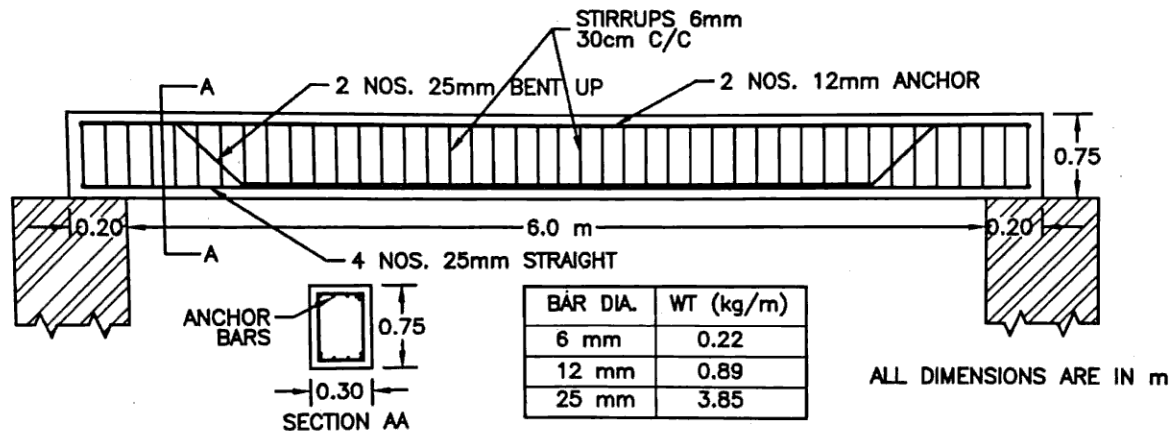


Figure-1

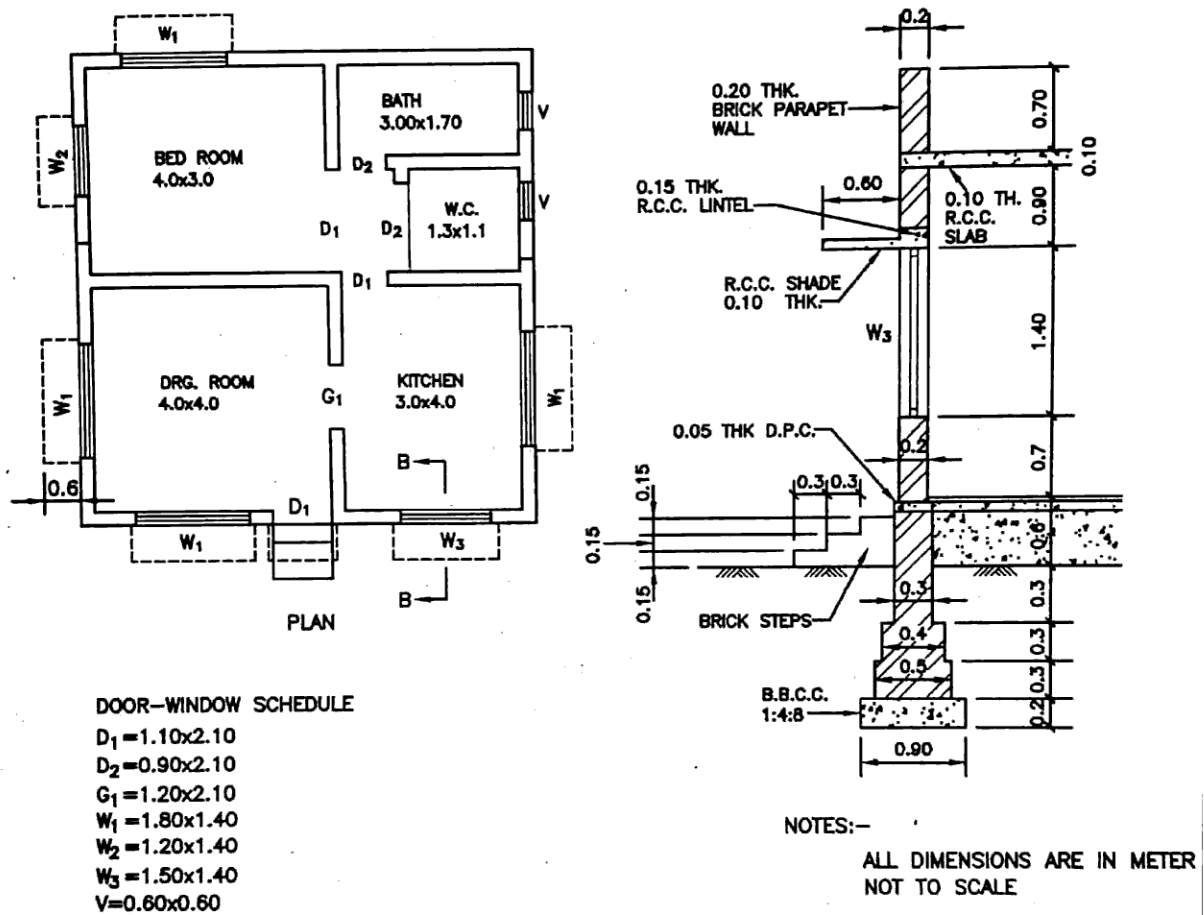


Figure - 2