Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BARCH – SEMESTER VI– • EXAMINATION – SUMMER 2015

Subject code: 1065005 **Date: 12/05/2015**

Subject Name: Estimating & Costing

Time: 10.30am-12.30pm **Total Marks: 50**

Instructions:

1. **Question number one and two are compulsory.**
2. **Attempt any three questions from remaining five questions.**
3. **Make suitable assumptions wherever necessary.**
4. **Figures to the right indicate full marks.**
5. **Each question carry equal marks (10 marks)**

Q.1	(a)	Prepare detail Measurement sheet for the following items of work for residential plan as given in fig. (a), all wall thickness (exterior & interior) are 30cm, i) Earthwork in Excavation ii) Brick-work up to Plinth, iii) Doors & Windows iv) White washing Also write brief specification for each item.	**10**
Q.2	(a)	Prepare detail measurement sheet for RCC slab as given in fig. (b).	**10**
Q.3	(a)	Define Specification. Write its importance. Explain in detail types of specifications.	**05**
	(b)	Write down detail specification of first class brick work in cement mortar (1:6) for superstructure.	**05**
Q.4	(a)	Define the following – i) Lead, ii) Lift, iii) Royalty charges, iv) Open Specification, v) Analysis of rates.	**10**
Q.5	(a)	Write down in detail purpose of rate analysis and Factors affecting rate analysis.	**05**
	(b)	Write short note on – i) Contingencies, ii) Work-charged Establishment.	**05**
Q. 6	(a)	Perform Rate Analysis for PCC (1:2:4) in foundation with ballast 40mm for 10 cubic meter.	**10**
Q. 7	(a)	Perform rate analysis for 2nd class brickwork in foundation and plinth with 20cmx10cmx10cm bricks with cement mortar (1:6) for one cubic meter.	**10**

P.T.O.

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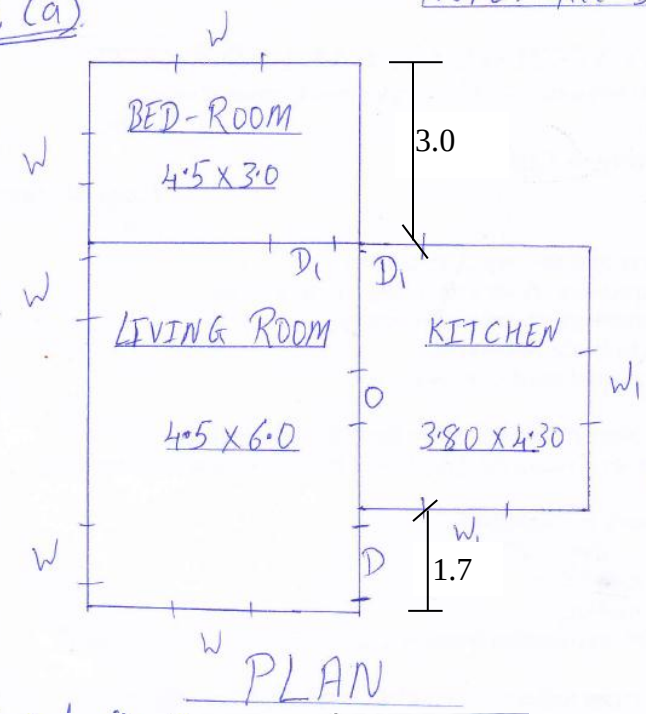
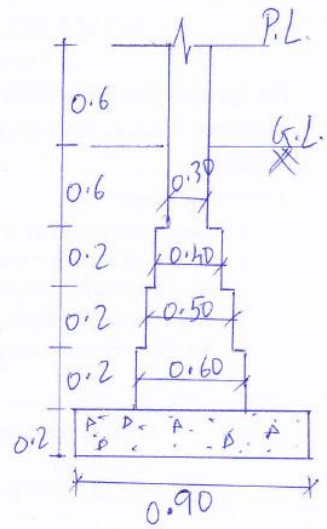
⇒ Fig. (a)

NOTE:- All Dimensions Are In Mtr.





FOUNDATION SECTION

⇒ Schedule:-

→ DOOR - D - 1·20 X 2·10

D1 - 1·0 X 2·10

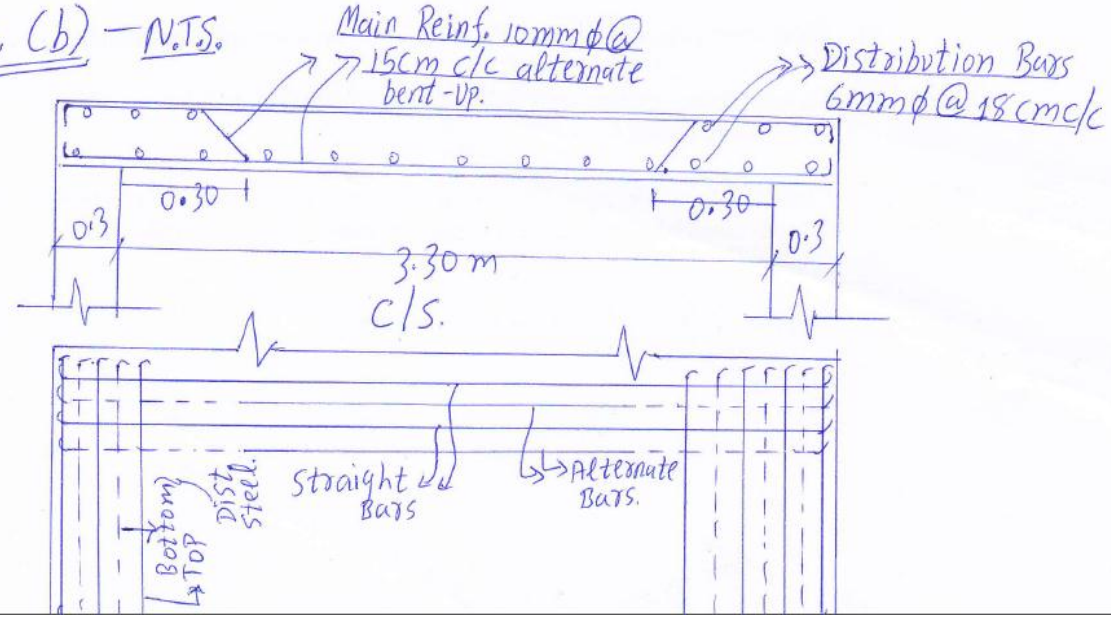
OPENING - O - 1·20 X 2·10

WINDOW - W = 1·2 X 1·40

W1 = 1·50 X 1·20

FLOOR TO FLOOR Ht. = 3·0 m.

⇒ Fig. (b) — N.T.S.


Main Reinf. 10mm ϕ @ 15cm c/c alternate bent-up.
Distribution Bars 6mm ϕ @ 18cm c/c
0.30
0.30
0.3
0.3
3.30 m
C/S.
Straight Bars
Alternate Bars.
Bottom
TOP
Dist Steel.