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# GUJARAT TECHNOLOGICAL UNIVERSITY Diploma Architecture - SEMESTER - V• EXAMINATION - WINTER 2016 

## Subject Code: 3356206

Date: 01/12/ 2016

## Subject Name: Estimating \& Costing

 Time: 10:30 AM TO 12:30 PMTotal Marks: 50

## Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of programmable \& Communication aids are strictly prohibited.
5. Use of only simple calculator is permitted in Mathematics.
6. English version is authentic.
Q. 1 (a) Define any four from following terms. 04
7. Quantity survey
8. Estimating
9. Specification
10. Detailed estimate
11. Centre line method
12. Analysis of rates
(b) Explain in detail modes of measurement for following items.
13. Excavation
OR
14. Standard modular brick
15. Concrete
OR
16. Stone masonry
Q. 2 (a) Explain in detail "Schedule of Rates (SOR) ". ..... 04
(b) Write detailed specification for following. ..... 06
17. Brickbat lime concrete (1:2:4) for foundation

## OR

1. Reinforced Cement Concrete (RCC) (1:2:4).
Q. 3 Attempt any two from following.
(a) Explain Lump sum contract with its advantages and disadvantages.
(b) Write note on:
2. Earnest money
3. Security deposit
(c) Explain in detail 'TENDER'.
Q. 4 (a) $\begin{aligned} & \text { Workout the quantities of following items of work by using separate wall } \\ & \text { method. Use given typical wall footing section [Figure 1]. }\end{aligned}$
4. Earthwork in excavation for foundation
5. Foundation concrete CC (1:4:8)
6. Brickwork in footing
7. Brickwork in superstructure
8. C.C. (1:2:4) for RCC slab, lintel including Form work
9. Woodwork for doors, windows
10. Internal and external plaster.

Take sizes of Door D: $1.2 \mathrm{~m} * 2.1 \mathrm{~m}$
Window W : $0.9 \mathrm{~m} * 1.0 \mathrm{~m}$
Consider lintel depth $=0.15 \mathrm{~m}$
Slab thickness $=0.10 \mathrm{~m}$
Cement plaster thickness $=12 \mathrm{~mm}$
(b) Make Abstract sheets for first five quantities of above example.

## OR

Write purpose of 'Analysis of Rates'.


Fig. 1 (Q:4 a)

