

SES
SIOT, KHARGHAR
CIVIL DEPARTMENT
ASSIGNMENT – 1

Sub: Estimating and Costing (17501)

Class - TY

- 1) What is Estimating & Costing? State its purpose.
- 2) State the estimates used in following situations.
 - a. If there is change in design & actual cost construction of a project work increases by 5 to 10%: _____
 - b. For execution of project for technical sanction: _____
 - c. During the execution of main work if it is found necessary of additional work:

- 3) Prepare approximate estimate of a town hall building having plinth area equal to 1500 m².
 - i) Plinth area rate Rs. 4,000 per m²
 - ii) Water supply and sanitary installation – 5 % of cost of building
 - iii) Electric installation – 10 % of cost of building
 - iv) Other services – 5 % of cost of building
 - v) Contingencies – 3 % of overall cost of building
 - vi) Supervision charges – 8 % of overall cost of building

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ASSIGNMENT – 2

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Class – TY

- 1) Write the specifications of following items of work as per PWD/GOVT.
 - a. Earthwork
 - b. Concrete in foundation
 - c. D.P.C
 - d. Masonry
 - e. R.C.C work
 - f. Flooring
 - g. Plastering
 - h. Painting

- 2) Draft the standard formats of Abstract sheet and Face sheet.

- 3) State rules of deductions per IS 1200 for:
 - a. Brickwork for walls
 - b. Painting work (Internal)

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ASSIGNMENT – 3

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- 1) Prepare checklist for RCC framed structure.
- 2) Explain methods for taking out quantities.
- 3) State different methods to workout earthwork quantity.
- 4) Calculate the quantity for road from the following data by using mean area method:

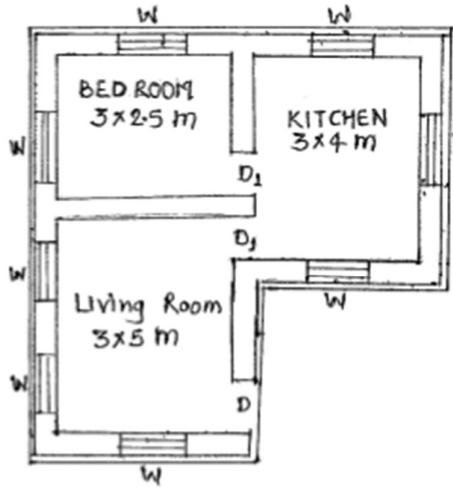
Formation width = 12 m

Slope of banking = 2 : 1

Slope in cutting = 1.5 : 1

Chainage	0	30	60	90
Ground level	500	499.70	498.90	497.60
Formation level	497.500	497.300	497.100	496.800

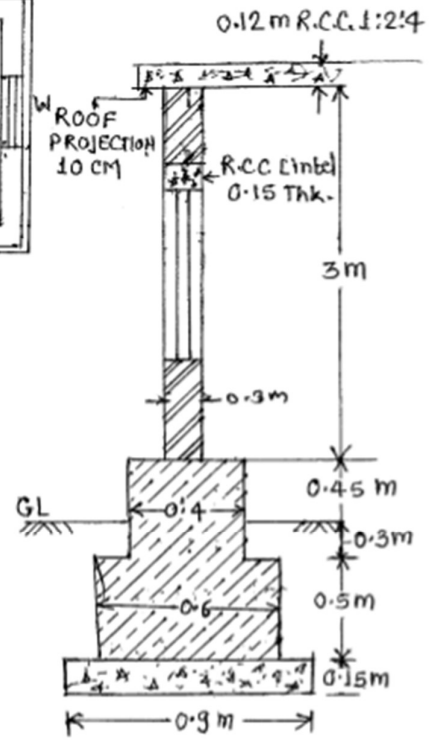
- 5) Workout quantities of items of work for figure given
 - i) Earthwork in excavation
 - ii) U.C.R. masonry in C.M. 1 : 6 in foundation and plinth
 - iii) Brickwork in C.M. 1 : 5 in superstructure, Thk. – 30 cm
 - iv) R.C.C. work in roof slab (M20 concrete).



PLAN

OPENINGS

- D - 1.2 m x 2.1 m
- D₁ - 1 m x 2.1 m
- W - 1.2 m x 1.5 m



SECTION

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ASSIGNMENT – 4

Sub: Estimating and Costing (17501)

Class – TY

- 1) State the factors affecting Rate analysis.
- 2) State the factors affecting Task work.
- 3) Define:
 - a. Standard Lead
 - b. Extra Lead
 - c. Lift
- 4)
 - a. Prepare rate analysis for U.C.R. masonry in C.M. 1 : 5 in foundation and plinth.
 - b. Prepare rate analysis for plain cement concrete of grade M 15 (1 : 2 : 4).

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ASSIGNMENT – 5

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Class – TY

- 1) State the softwares used to prepare estimate. Explain any one.
- 2) Work out the quantity of following items for septic tank shown below.

