



**SRI VIDYA COLLEGE OF ENGINEERING & TECHNOLOGY
VIRUDHUNAGAR**



CE6704 ESTIMATION & QUANTITY SURVEYING

UNIT - V

REPORT PREPARATION

QUESTIONS & ANSWERS

PART – A

1. What are the Principles of report preparation?(OR)

Why report on estimate is required? (Nov. /Dec. 2010, 2011)

Estimate is usually accompanied with a report which gives all information in brief, of the whole work or project. Report should be such as to give a clear picture or idea of the whole project or work.

- i. Brief history, with reference to the proposal.
- ii. Object necessity, utility and feasibility of the project with reasons.
- iii. Selection of site or selection of alignment.
- iv. Surveying.

2. Define the term sinking fund. (Nov. /Dec. 2010)

The fund which is gradually accumulated by way of periodic on annual deposit for the replacement of the building or structure at the end of its useful life is termed as *sinking fund*.

The object of creating sinking fund is to accumulate sufficient money to meet the cost of construction or replacement of the building or structure after its utility period.

3. What is M-Book (Measurement Book)? (Nov. /Dec. 2008)

The measurements of all works and supplies are recorded in the Measurement Book Form No. 23 and payment of all works and supplies are made on the basis of measurement recorded. The measurement books are very important account records.

Form 23-Measurement Book

Particulars	Detail of actual Measurement				Contents of area
	No.	L	B	D	

4. What is Standard rent? (Nov. /Dec. 2011)

For every Government residential building the rent, the occupant has to pay, is normally calculated on a statement known as the *Rent Statement*. The rent statement is prepared under the following conditions.

5. What is known as arbitration? (Nov. /Dec. 2011)

Arbitration means the settlement of a dispute by the decision of a third person chosen and acceptable as a judge. The decision of the arbitration is binding on both the parties. In public works department the superintending engineer functions as the arbitrator parties. In public works department the superintending engineer functions as the arbitrator.

6. Write a note on town planning Act. (Nov. /Dec. 2011)

An Act to provide for planning the development and use of rural and urban land in the State of Tamil Nadu and for purposes connected therewith.

THE TAMIL NADU TOWN AND COUNTRY PLANNING ACT, 1971

(Tamil Nadu Act 35 of 1972).

7. State the four ways of classification of cost control (May/June 2007)

The process or activity on controlling costs associated with an activity, process, or company. Cost control typically includes (1) investigative procedures to detect variance of actual costs from budgeted costs, (2) diagnostic procedures to ascertain the cause(s) of variance, and (3) corrective procedures to effect realignment between actual and budgeted costs.

8. State the two cost control coding system adopted at work site. (May/June 2007)

Cost control coding system at site	
201	Clearing and Preparing Site
202	Substructure
202.1	Excavation and Shoring
202.2	Piling
202.3	Concrete Masonry
202.31	Mixing and Placing
202.32	Formwork
202.33	Reinforcing

PART – B

1. **Write report to accompany an estimate for residential building for a executive engineer.**
(Nov./Dec. 2016)

Report On Estimates for the Construction of Residential Building

The detailed estimate for construction of a residential building for the Executive Engineer at _____ has been prepared in compliance of S.E. _____ letter no _____. dated _____.

There is no building for the residence of the Executive Engineer at Udaynagar and he has to live in a rented building with meager accommodation at a very high rent. It has, therefore, been proposed to construct a residential building for the Executive Engineer. The head of the accounts will be 50 civil original works, building.

The estimate provides for the following accommodation:-

One drawing room, one dining room, three bed rooms, one guest room, and the necessary store kitchen, baths, front and back verandahs and motor garage per plan enclosed. A site has already been selected having a land of 60 m 30 m for the construction of the building having good soil and proper drainage and this much of land has to be acquired. The building shall be oriented to face north direction

The building shall have lime concrete foundation and first class brick masonry with lime mortar up to plinth level and the superstructure shall be of first class brick work in cement mortar, 1:6 Lintels shall be of R.B. work and roof shall be R.C.C with lime concrete terrace finishing. The drawing and dining rooms shall have mosaic floor and other rooms 2.5 cm c.c. floor over 7.5 cm lime concrete. Inside and outside walls shall be 12 mm cement line plastered 1:1:6, and ceiling shall be 6 mm cement plastered 1:3. Inside of drawing and dining rooms shall be colour washed and inside of remaining rooms shall be white washed and outside wall be colour washed. Doors and windows shall be $4.5\text{cm } 1\frac{3}{4}$ " thick teak wood with chaukhatosal wood and enamel painted. All work shall be strictly as per detailed P.W.D. Specification.

The estimate has been prepared at P.W.D Schedule of rates, and for non-schedule items on analysis of rates. The foundation has been designed for a safe load of 9 tonne per sq m (8 ton per sq ft) and the R.C.C roof has been designed for a safe load of 150 kg per sq m (30 lbs per sq ft) with 1400 kg per sqcm (20000 lbs per sq in) as safe tensile stress of steel and 50 kg sq cm (750 lbs per sq in) as safe compressive stress of concrete. All designs and calculations have been included in the estimate. Plans and drawings and site plans are also enclosed with the estimate.

Provision has been made for electrification and sanitary and water supply works and 20% of the estimated cost of the building works has been included for these works. As there is no sewer line in the area a septic tank shall have to be constructed for which lump sum provision of Rs.700,00 has been made in the

Provision for compound with a gate in the front and barbed wire fencing on the sides and back, and approach road have also been made in the estimate. A statement of important materials as cement, steel, coal, etc., which shall have to be arranged by the department is also enclosed with the estimate.

A rent statement is also enclosed. The work shall be carried on contract by inviting tenders. The work shall be completed within six months from the date of start. The estimate work out as Rs. 5,000,00 and is submitted for sanction and allotment of fund.

2. Prepare report on the estimate for construction of culverts. (May/June 2013)

Report on Estimate for Construction of a Culvert

The estimate has been prepared for the construction of an arch culvert of 3m span in 15 km-300m on _____ road. The road at this point is flooded almost every year during the rainy reason, causing flood and damages in the area. During the last inspection the Executive Engineer has asked to prepare an estimate and this estimate has been prepared in compliance of E.E_____ letter no _____ dated_____. The cost of construction will be met from 50 civil work special repairs.

The culvert has been designed for I.R.C Class a loading. The catchment area has been determined from the 2.5 cm map of the area, which comes to 1200 acres. Catchment area in acres, and c = constant and has been taken as 0.2. All calculation and design have been enclosed with the estimate. The soil has been tested and has been found to be good, and ordinary spread foundation will be sufficient. The foundation shall be of cement concrete 1:4:8 and abutments, wing walls and parapets shall be of brick masonry in 1:5 cement mortar, the arch work shall be of brick masonry in 1:3 cement mortars. Exposed surfaces shall be cement pointed 1:2. All works shall be as per detailed P.W.D Specifications. The estimate has been prepared at P.W.D Schedule of Rates.

A statement of materials, cement, bricks, coal, etc., required for the construction, has been enclosed with the estimate. The work shall be executed on contract by inviting tenders and the work shall be started after the rainy season and shall be completed within four months time. The estimate amounting to Rs.15,000.00 is submitted for sanction and allotment of fund.