

# Rate Analysis

Rate analysis has various meanings in its different domains. But here we will the rate analysis in terms of the construction projects. In the construction sector, rate analysis refers to determining the rate of different construction materials and hence finding the overall cost of the construction. The [GATE exam](#) may carry the rate analysis-based questions every alternate year.

Rate analysis for different items is calculated in different units. For example, the rate of plastering work is calculated in terms of the surface area, but the rate for brickwork is calculated in terms of the cubic meter. The rate of different items may depend on several factors. Some of these factors are listed below:

- Work specification
- Quality of material
- Labour costs
- Labour wages
- Location of the site for the construction
- Overhead charges
- Profit

## What are the Pre-Requisites to Carry Out Rate Analysis?

Prerequisites to carrying out the rate analysis are the factors on which the rate of the different materials depends. And also the parameters on which analysis may depend. Here are a few factors that are considered pre-requisite to carrying out the rate analysis.

- **Equipment cost**

Total cost for the machinery equipment required for the project's construction.

- **Labour cost**

Labour cost depends on the total number of mason and labours. These costs also depend on the type of construction project etc.

- **Material cost**

The cost of materials depends on the materials' quantity, the unit of measurement, and the rates of every item. Material costs also include taxes and transportation charges.

- **Profit of the contractor**

The contractors' profit is considered as 15% for small projects and 8% for large projects. But on average, it is considered 10% of the overall project cost.

- **Overhead charges**

Generally, 2 to 5 % of the overall project cost is considered as the overhead charges of the project. It includes office rent, furniture charges, etc.

## Importance of Rate Analysis

Rate analyses are carried out to know the project's total cost. It consists of the sum of the rate of different project items. Rate analysis helps to understand the estimate of the new projects as it involves the overall estimation of the rate of different items.

- Rate analysis helps to opt for the tenders.
- It helps to compare the different tenders.
- It gives an idea for the estimation of the new project.
- With the help of rate estimation, we can also compare the different projects.

## Factors Which Affect on Rate Analysis

The rate analysis of a project depends on many factors, including the rate of the different items and the type of work. Here a few factors are listed below on which rate analysis of civil construction works depends.

- Specifications of the construction work
- Quantity and quality of the materials
- Ingredients used for the concrete construction
- The thickness of plastering work
- Location of the construction site
- Location of the resources
- Availability of the laboures
- Contractor's profit
- Overhead costs

## Rate Analysis in Construction

Rate analysis of the civil construction works is carried out in the specific units. The rates are analyzed for the different items required for the construction. Rate analysis is required to know the overall estimate of the project. Here are the few purposes of the rate analysis listed below.

- It is required to find the project's actual cost per unit of quantity.
- With the help of rate analysis, proper economical use of the materials can be carried out.

- Analysis of the rates is required to know the cost of extra items (use, if any).
- It also helps to revise the rates of existing items if any updation in rates has been done.

