

FAQ's

1. Explain the concept of Construction Management & Construction planning with its Objectives and Functions.

Construction Management & Construction Planning

- As the name suggest two words: Construction Planning & Construction Management, which are co-related with each other.
- In common it meant that we have to execute the plan of construction by means of various management techniques.

Objectives of Construction Management:

- Completing the work within specified time and budget
- Evolving a reputation for high quality workmanship
- Providing safe working conditions for staff and workers
- Taking sound decisions at lowest practical management level through delegation of authority
- Motivating people to give their best
- Creating an organization that works as a team

Functions of Construction Management:

It involves:

- Crystallizing objectives
- Collecting and synthesizing information
- Developing alternatives within specified constraints
- Comparing alternatives in terms of objective feasibility and consequences
- Selecting optimum course of action
- Establishing policies, methods, systems, standards and budgets for objectives

Organizing Construction Management:

- Dividing the work into component activities
- Designing job structures
- Defining targets and responsibilities
- Allocating resources
- Delegating specific tasks to individuals
- Establishing organizational chart for better coordination

Procuring:

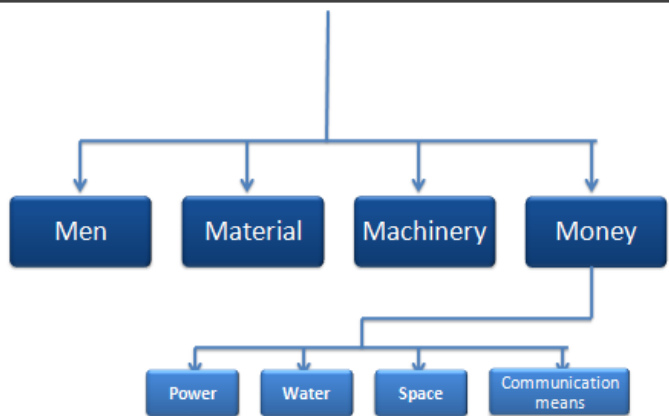
- Providing right quality resources at right time
- Preparing resource procurement schedules
- Developing specifications for required resources
- Deciding appropriate source of procurement
- Budgeting resources and arranging approvals and purchases
- Preventing wastage at site

Directing or Leading:

- Providing effective leadership
- Motivating participants behavior
- Communicating instructions and orders
- Providing suitable climate for subordinate's development

2. Explain what are Constructional Resources.

Constructional Resources



Men:

- Work force – man power
- Technical and managerial personnel (organization)
- Work force is Skilled and unskilled labor.
- Timely employment of just required numbers of workmen of right trade and skill.
- Over-manning and under-manning both are bad.
- Sudden fluctuations in labor strength should be avoided.
- Describe work elements
- Assess no. of workdays to be put every week/month.
- Draw a chart of manpower needed using CPM network.
- Adjust schedule and requirement avoiding sudden fluctuations.
- Ascertain availability of right trade and skill for recruitment.
- Maintain a reasonable ratio between supervisor and workmen.
- Give responsibilities to the group of employee.
- Provides adequate communication.
- Demarcates authority, responsibilities, and duties of each group and employee.
- Coordinates and controls activities of group and individual to achieve common objective.

Materials

- Brick, stone, timber, cement, water, aggregate, paint, electrical fittings, lime, sand etc.
- Material schedule showing quantity, quality and time of delivery should be prepared with reference to work schedule
- Plan the adequate supply of material.

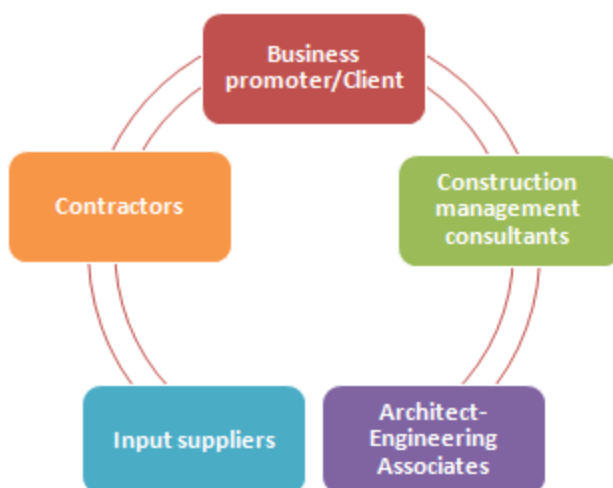
Machinery

- Requirements depends on type of project.
- Equipments can be transferred from one site to another or can be purchased new depending on economic analysis.
- Non-availability of right equipment or tool may lead to financial loss or can hold up the work.

Money

- Most important resource
- All other resources depends on availability of funds.
- So financial resources should be planned very carefully.

3. Explain what are Constructional Participants.



Business Promoter/Client

- Also called the client, he is the potential owner of the construction facility.
- It is he who sponsors the work, finances their construction and utilizes the facility constructed.
- Client may be a govt. body, a public or private enterprises. Construction work can be executed through clients own organization or through contractors

Construction Management Consultants

The emerging trend these days is to hire these consultants for rendering certain services on contract basis. Generally task assigned includes –

- (a) Project feasibility study, including cost estimates.
- (b) Site survey and soil investigation.
- (c) Estimating, initial planning and budgeting
- (d) Scrutiny and coordination of design and drawing work .
- (e) Processing prequalification of construction agencies, tendering and awarding contracts to the successful bidder.
- (f) Designing project organization for executing works and developing standard operating procedures and systems.
- (g) Developing detailed construction plans, project schedules and performance measuring standards.
- (h) Supervising works, including administration of contract and controlling of project time, cost and quality objectives.

Architect-Engineering Associates

- An architect is an individual who designs the buildings, landscapes and other artistic features.
- The engineers associated with architects develop structural, electrical, mechanical and other specialist systems and designs.
- Architect-engineering associates are the firm involving both architects as well as engineers to provide complete design services under one roof.

Input Suppliers

- Construction process needs resources input. Construction inputs exists in the form of men, materials, machinery and money.

Contractors

- Construction contractors form the backbone of the construction business as they execute most of the construction work.
- In the competitive construction business, the contractor generally tends to specialize in particular area of construction.

4. What do you mean by Estimation in Construction Practices?

- Estimating is the process of finding an estimate, or approxiamtion of the construction, which is the value that is usable for some purpose even if the input value is uncertain.
- The estimate that exceeds the value of the actaual construction, it is called over estimate and the one that is below the value of the actual construction is called underestimate.

5. How do you explain Productivity?

- Contractors and owners are often concerned with the labor activity at the job sites. For this purpose, it is convenient to express labor productivity as functional units per labor hour for each type of construction task.
- The measure of productivity is defined as a total output per unit of a total input. In construction, the output is usually expressed in weight, length of volume and the input resource is usually in cost of labor or man hours.