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## Internal Assessment Test 1 –November 2022

Sub:	CONSTRUCTION MANAGEMENT & ENTREPRENEURSHIP					Sub Code:	18CV51	Branch:	CIVIL	
Date:	04.11.2022	Duration:	90 min's	Max marks:	50	Sem / sec:	5/A		OBE	
<b><u>Answer all questions. Assume any missing data suitably.</u></b>								MARKS	CO	RBT
1. Define Management and List out management functions or process and explain in brief? 2. What are the Nature of Management explain ? 3. Define Planning.? What are the types of plans 4. What is the Role of Construction Project Management and elements of Project Managements.?								[10]	CO1	L3
								[10]	CO1	L3
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								[10]	CO1	L3
5. Explain the Concept of Work break down Structure with an Example								[10]	CO1	L3

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## **1. Define Management and List out management functions or process and explain in brief?**

Ans: Management is the art of getting things done through people. Managers achieve organizational goals by enabling others to perform the necessary tasks by effectively identifying right person for right task.

Functions of Management

1. Forecasting (estimation of future sales)
2. Planning (avoid difficulties that may arise in future)
3. Organizing (arranging money, material, machinery, men, etc., of actual execution of work)
4. Staffing (involves recruitment, selection, training and development of personnel required to run the organization)
5. Directing and Motivating (the recruited employees so that they perform their duties effectively)
6. Controlling (the work of employees to ensure everything is proceeding as per plan)
7. Co-ordinating (the efforts of all employees in all departments to move towards common goals)
8. Communication (system should be efficient so as to avoid confusion and misunderstanding)
9. Leadership (qualities required in managers & supervision)
10. Decision Making (to be professional and result-oriented)

### **Forecasting:**

Forecasting is nothing but the estimation of future events. Forecasting involves not only estimation of quantity of future sales but also as to when it should be available, where it should be available and at what quantity level. Sales forecast is usually followed by production forecast and forecasts for costs, finance, purchase, profit or loss, etc.

### **Planning:**

Planning is the primary function of management. It is looking ahead and preparing for the future. It determines in advance what should be done. It is conscious determination of future course of action. This involves determining why to take action? What action? How to take action? When to take action? Planning involves determination of specific objectives, programs, setting policies, strategies, rules and procedures and preparing budgets. Planning is a function which is performed by managers at all levels – top, middle and supervisory. Plans made by top management for the organization as a whole may cover periods as long as five to ten years, whereas plans made by low level managers cover much shorter periods.

### **Organizing:**

Organizing is the distribution of work in group-wise or section wise for effective performance. Once the managers have established objectives and developed plans to achieve them, they must design and develop a human organization that will be able to carry out those plans successfully. Organizing involves dividing work into convenient tasks or duties, grouping of such duties in the form of positions, grouping of various positions into departments and sections, assigning duties to individual positions and delegating authority to each position so that the work is carried out as planned. According to Koontz O'Donnel, "Organization consists of conscious coordination of people towards a desired goal". One has to note that different objectives require different kinds of organization to achieve them. For Example, an organization for scientific research will have to be very different from one manufacturing automobiles.

### **Staffing:**

Staffing involves managing various positions of the organizational structure. It involves selecting and placing the right person at the right position. Staffing includes identifying the gap between manpower required and available, identifying the sources from where people will be selected, selecting people, training them, fixing the financial compensation and appraising them periodically. The success of the organization depends upon the successful performance of staffing function

### **Directing and Motivating:**

Planning, organizing and staffing functions are concerned with the preliminary work for the achievement of organizational objectives. The actual performance of the task starts with the function of direction. This function can be called by various names namely "leading", "directing", "motivating", "activating" and so on. Directing involves these sub functions:

- (a) Communicating: It is the process of passing information from one person to another.
- (b) Leading: It is a process by which a manager guides and influences the work of his subordinates.
- (c) Motivating: It is arousing desire in the minds of workers to give their best to the enterprise.

### **Controlling:**

Planning, organizing, staffing and directing are required to realize organizational objectives. To ensure that the achieved objectives confirm to the pre-planned objectives control function is necessary. Control is the process of checking to determine whether or not proper progress is being made towards the objectives and goals and acting if necessary to correct any deviations. Control involves three elements:

- (a) Establishing standards of performance. --- BASE LINE
- (b) Measuring current performance and comparing it against the established standard.
- (c) Taking action to correct any performance that does not meet those standards.

### **Co-ordinating:**

In an organization, there may be many departments and a large number of workers working at various levels and at various work centres. In this situation there is a need to co-ordinate the individual efforts of all workers towards common goals. Co-ordination is the orderly arrangement of group effort to provide unity of action

### **Communication:**

Communication is the process by which instructions are transmitted, received and understood by people working in the organization. Communication of ideas, thoughts or information plays an important role in the working atmosphere of any organization.

### **Leadership:**

Leadership is the quality of the behaviour of a manager where he inspires confidence and trust in his subordinates, gets maximum cooperation from them and guides them towards company goals.

### **Decision Making:**

A decision is defined as a course of action chosen from available alternatives for the purpose of a desired result. If there is one activity which can be considered the most important among all other activities at higher levels of management, it is decision making.

## **2. What are the Nature of Management explain ?**

**Ans:** Nature and Characteristics of Management

1. Management is a Universal Process (applies to all types of institutions)
2. Management is Goal Oriented (aimed at accomplishing specific goals)
3. Management is a Social Process (deals with human beings)
4. Management is a Coordinating Force (avoiding duplication and overlapping)
5. Management is Intangible (it is an unseen force)
6. Management is Dynamic (an ongoing process)
7. Management is Multi-disciplinary (it draws knowledge from various disciplines)
8. Management is a Creative Activity
9. Management is Decision Making
10. Management is a Profession

### **Management is a Universal Process**

The principles and concepts of management are applicable to every type of industry. The practice of management is different from one organization to another according to their nature.

### **Management is Goal Oriented**

This means that Management is always aimed at achieving specific goals. In fact, the success of Management is measured by the extent to which the desired objectives are achieved

### **Management is a Social Process**

Management basically deals with managing human beings and their emotions, talents, attitudes, culture, ethics, education, etc. Management is therefore a social process because it involves people who are influenced by social traditions, customs and regulations.

### **Management is a Coordinating Force**

Management co-ordinates the efforts of the employees in an organization through orderly arrangement of activities so as to avoid duplication and overlapping

### **Management is Intangible**

It means that Management cannot be touched and felt. It does not have a physical presence. It is an unseen force. Its presence can only be felt by the results of its efforts such as orderliness, efficiency, profits, working climate, employee satisfaction, etc

### **Management is Dynamic**

Management is not static. Over a period of time new principles, concepts and techniques are developed and adopted by management. Management is changed accordingly to the social change.

A principle is truth which establishes cause and effect relationships of a function. Principles are developed by integration of ideas from various disciplines supported by practical evidence. These principles are flexible and change with the environment in which organization works. Continuous researches are being carried on to establish new principles; many older principles are changed by new principles. There is nothing permanent in management.

### **Management is Multi-disciplinary**

Management is multidisciplinary. It draws freely ideas and concepts from the disciplines like economics, sociology, psychology, statistics, operations research etc. Management integrates the ideas taken from various disciplines and presents newer concepts which can be put into practice. The integration of these ideas is the major contribution of management.

### **Management is a Creative Activity**

Management provides creative ideas and new imagination apart from giving progressive vision to group effort

### **Management is Decision Making**

Decision-making is selecting the best among alternative courses. Decision-making is an important function of a manager. Whatever a manager does, he does it by making decisions. The success or failure of an organization depends upon the quality of decision. A manager must make a right decision at right time

### **Management is a Profession**

Management is a profession because it possesses the qualities of a profession. The knowledge is imported and transferred. The established principles of management are applied in practice.

### **3. Define Planning.? What are the types of plans**

**Ans:** Planning is deciding in advance what to do, how to do it, when to do it and who is to do it. Planning bridges the gap from where we are to where we want to go. It makes it possible for things to occur which would not otherwise happen.

#### **Types of Plans**

##### ➤ Standing Plans

1. Objectives
2. Policies
3. Strategies
4. Procedures
5. Methods
6. Rules

##### ➤ Single Use Plans

1. Programmes
2. Schedules
3. Projects
4. Budget

**Standing Plans** - Plans which are put to use again and again. Examples: Planning for Demand Fluctuation, Planning for employees absence.

#### **Objectives**

Objectives are goals or end-points towards which all business activities are directed. The term Objectives or goals are the desirable end results planned by the management or administration and expected to be achieved by the organization.

#### **Policies**

Policies are guidelines setup by the company for managerial decision-making. They provide standing answers to recurring problems. They are statements that tell people what they may or may not do.

#### **Strategies**

Strategies specify the route taken to achieve company objectives and policies. Strategies are broad plans set by the management specifying the route taken to achieve company objectives.

#### **Procedures**

Procedures are 'Action Guidelines' which specifies how particular activities are to be carried out. Procedure is a step-by-step sequence of required action in order to achieve a certain goal. A procedure basically lays down the manner or method by which work is to be performed in a standard or uniform way.

#### **Methods**

Methods are sub-units of procedure It is the break-up of each step of a standard procedure into several sub-steps. It is a focus on the best way of doing a piece of work or the best technique to be employed to carry out a task.

#### **Rules**

Rules are standard guidelines which specify what is good and what is bad for an employee/organization. Rules are always established to direct or restrict action in order to govern the behavior of individuals.

#### **Programmes**

A program is a precise plan which lays down the operations to be carried out to accomplish a given work.

## Schedules

A Schedule is an extension of a program which answers the question 'when' for every action specified in the program. Schedules are like time – tables which clearly specify when, what and where each element of work is carried out.

## Projects

A Project is a small program Projects are individual portions of a general program which are clear cut and relatively distinct.

## Budgets

A Budget is a written plan of future activities of the company in monetary terms. A budget clearly defines the anticipated cost of attaining an objective.

**Single Use Plans** – Plans which are non-recurring in nature and are used for cases which are unique and non-repetitive in nature. Examples: Making Budgets, Survey Project.

## 4. What is the Role of Construction Project Management and elements of Project Managements.?

### Ans: Project – Construction Project

Project-Management is the art & science of converting the client vision into reality by working efficiently, effectively & safely.

Construction Project Management is the art and science of Managing all aspects of the project to achieve the project mission objectives, within the specified time, budgeted cost and pre defined quality specification's working efficiently & effectively in the changing project environments with due regard to construction manpower, health & safety and safeguarding the environment surrounding from ill/ Hazards

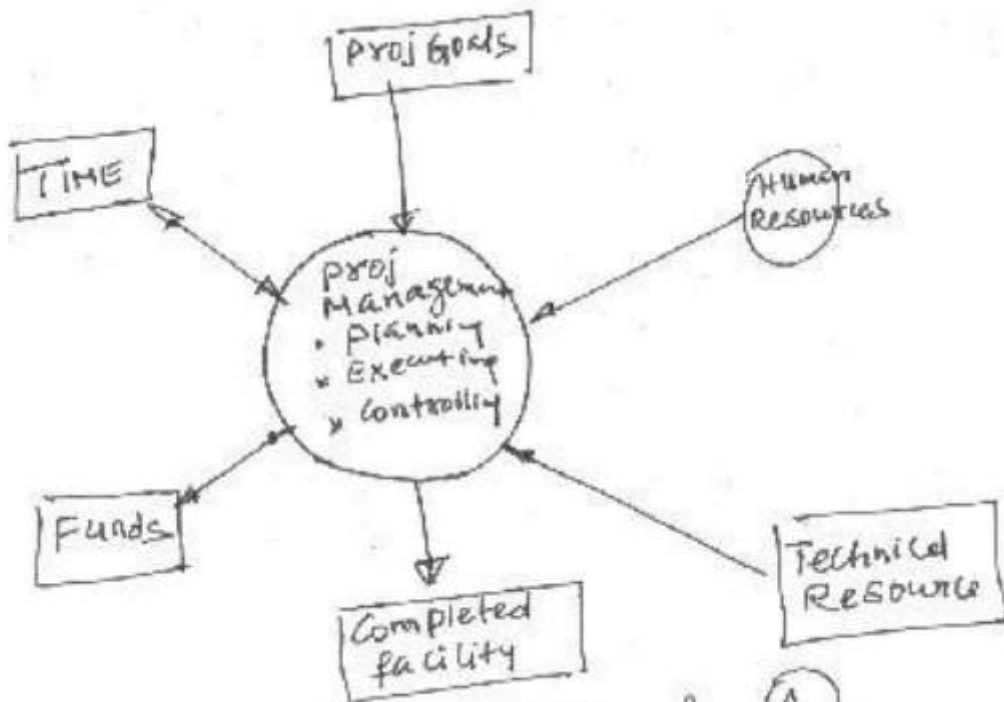


Figure 1: Elements of Project Management

Project Management as defined earlier have the application of knowledge, skills, tools and techniques to a broad range of activities to meet the requirements of the particular project.

Project Management is the process of controlling the achievement of the project objectives. By utilizing the existing organizational structure and resources, it seeks to manage the Project by applying a collection of tools and techniques without adversely disturbing the routine operations of the company.

Project Management aim's to achieve the stated goals of the project leading to completed facility by virtue of

1. Planning
2. Organizing and Executing
3. Controlling Time
4. Funds – Control
5. Controlling Human Resource
6. Controlling Technical Resource
7. Method of Construction Planning:
  - Setting Objectives – Micro/Macro
  - Identification of Resources
  - Forming Strategy. Execution:
    - Resource Mobilization and Allocation
    - Methodology for Construction – Time – Quality – Cost
    - Guiding Execution.
  - Coordinating effort and motivating staff. Controlling:
    - Measuring achievement goals
  - Reporting
  - Resolving Problem

These are performed on a continual basis till the goals of the project are realized. Project Management knowledge & practices are described under components process under.

<b>Process Groups</b>	<b>Knowledge Area's</b>
Initiating Planning Executing Controlling Closing	Proj. Integration Management Proj. Scope Management Proj. Time Management Proj. Cost Management Proj. Quality Management Proj. H R Manager Proj. Communication Management Proj. Risk Management Proj. Procurement Management (SCM)

**5. Explain the Concept of Work break down Structure with an Example**

**Ans:** Dividing complex projects to simpler and manageable tasks is the process identified as Work Breakdown Structure (WBS).

The project managers use this method for simplifying the project execution. In WBS, much larger tasks are broken-down to manageable chunks of work. These chunks can be easily supervised and estimated.

In project management and systems engineering, is a deliverable oriented decomposition of a project into smaller components. A work breakdown structure element may be a product, data, a service, or any combination. A WBS also provides the necessary framework for detailed cost estimating and control along with providing guidance for schedule development and control.

Project Name	Task 1	Subtask 1.1	Work Package 1.1.1
			Work Package 1.1.2
		Subtask 1.1	Work Package 1.2.1
			Work Package 1.2.2
	Task 2	Subtask 2.1	Work Package 2.1.1
			Work Package 2.1.2

**Figure: Example of outlined WBS**

WBS helps manager facilitates evaluation of cost, time and technical performance of the organization on a project. Provides management with information appropriate to each organizational level. Helps in the development of the organization. Breakdown structure which assigns project responsibilities to organizational units and individuals, Helps manager plan, schedule and budget. Defines communication channels and assists in coordinating the various project elements.

### **Construction of a WBS**

- i. Identifying the main deliverables of a project is the starting point for deriving a work breakdown structure.
- ii. This important step is usually done by the project managers and the subject matter experts (SMEs) involved in the project. Once this step is completed, the subject matter experts start breaking down the high-level tasks into smaller chunks of work.
- iii. In the process of breaking down the tasks, one can break them down into different levels of detail. One can detail a high level task into ten sub tasks while another can detail the same high level task into 20 sub tasks.