- Specific objectives are to be met or a specific product is to be created
- ❖ The project has a predetermined time span
- ❖ Work is carried out for someone other than yourself
- Work involves several specialism
- ❖ People are formed into a temporary work group to carry out the task
- ❖ Work is carried out in several phases
- ❖ The resources that are available for use on the project are constrained
- ❖ The project is large or complex

8. Illustrate few problems associated with Software Project.

- ❖ People-related problems
- Process-related problems
- Product-related problems
- Technology-related problems

9. Write down the Phases of Project Life Cycle

- Initiation Phase
- Project Definition Phase
- Feasibility Study
- Project
- Project Conclusion

10. Which Factor decides the success of a project?

- ❖ The resulting information system is acceptable to the customer.
- ❖ The system was delivered "on time."
- The system was delivered "within budget."
- ❖ The system development process had a minimal impact on ongoing business operations.

Big Questions

1. Paul Duggan is the manager of a software development section. On Tuesday at 10.00 a.m. he and his fellow section heads have a meeting with their group manager about the staffing requirements for the coming year. Paul has already drafted a document 'bidding' for staff. This is based on the work planned for his section for the next year. The document is discussed at the meeting. At 2.00 p.m. Paul has a meeting with his senior staff about an important project his section is undertaking. One of the programming staff has just had a road accident and will be in hospital for some time. It is decided that the project can be kept on schedule by transferring another team member from less urgent work to this project. A temporary replacement is to be brought in to do the less urgent work but this may take a week or so to arrange. Paul has to phone both the human resources manager about getting a replacement and the user for whom the less urgent work is being done, explaining why it is likely to be delayed' Identify which of the eight management responsibilities listed above Paul was responding to at different points during his day.

Project

- ✓ A project is defined as a "temporary endeavor with a beginning and an end and it must be used to create a unique product, service or result".
- ✓ Further, it is progressively elaborated. What this definition of a project means is that projects are those activities that cannot go on indefinitely and must have a defined purpose.
- ✓ For instance, if your project is less than three months old and has fewer than 20 people working on it, you may not be working in what is called a project according to the definition of the term.
- ✓ It has to be remembered that the term temporary does not apply to the result or service that is generated by the project.
- ✓ The project may be finite but not the result.

Examples

- ✓ Construction of Chennai Airport
- ✓ Computerising Apollo Hospital
- ✓ Conducting unit test

Project Characteristics

A project is not normal day to day activity undertaken by organization rather it is specific, non-routine activity of varying time frame and impact viability of the business in the long run. A typical project has following characteristics:

- ✓ Timeline : A project has a definite timeline with measurable starting and end point.
- ✓ Resources : A project has limited resource of capital and manpower.
- ✓ Tools : Special type of tools and techniques are used for project management (Gantt Charts, etc.)
- ✓ Team : Project management requires diverse team stretching across departments and functions.

Project Life Cycle

A typical project is divided into following phases. Each phase of the project has its own importance and impact on overall success of the project.

- ✓ Initiation Phase : In this phase of the project, feedback received from customers is analyzed and brainstorming is done as to develop new product or modify existing product to meet the new demands.
- ✓ Project Definition Phase : In this phase of the project efforts are made to define the solution for the problem posed by customers.
- ✓ Feasibility Study: In this phase, planning of the project is made and definite milestones are established.
- ✓ Project Execution : In this phase all activities and milestones established in the earlier phase are executed in a timely and orderly manner. This phase utilizes maximum of all resources.
- ✓ Project Conclusion: This is the last phase of the project. In this phase, final product or service is handed over to the operations team for commercial production.

Project Management

A project in any organization is collaboration across departments to achieve a single well defined objective. The process of planning, organizing and managing resources to achieve the organizational objective is called project management. Project management is very important in production of goods and services. Idea generation to final production of product or service, each step can be categorized as individual projects. Any project requires a project manager, who leads the project to its logical conclusion. Project manager is responsible for appointing team members with different background but essential in completion of the project.

Management Activities

Basically, the management involves the following activities:

- ✓ Planning Deciding what is to be done
- ✓ Organizing Making arrangements
- ✓ Staffing Selecting the right people for the job
- ✓ Directing Giving instructions
- ✓ Monitoring Checking on progress
- ✓ Controlling Taking action to remedy hold-ups
- ✓ Innovating Coming up with new solutions
- ✓ Representing Liaising with users, etc

2. Write short notes on risk evaluation. How to use the decision trees in risk evaluation? Write down the process of Risk matrix to determine risk level.

Risk Evaluation

- ✓ Risk is associated with almost every project.
- ✓ Risk can become an important factor when the project is not able to meet its objectives.
- ✓ Every possible risk must be identified, analyzed and minimized during the development of the software system

Risk Identification and Ranking

- ✓ Every projects evaluation involves risk handling issues.
- ✓ The project evaluation are used to identify the risks and quantify their potential effects.
- ✓ The importance and likelihood are classified as high, medium, low.
- ✓ The project risk matrix may be used as a way of evaluating projects or as a means of identifying and ranking the risks for a specific project