

1. What is software?

Software is a product consisting of programs to build and support by Software Engineering.

2. What is a work product?

A Work Product is an output of a product or The outcome of any milestone of the project.

3. Define AOP

Aspect-Oriented programming(AOP) is a programming technique that allows programmers to modularize crosscutting concerns.

4. What are the different roles of Software?

- Product
- A vehicle to transfer the product

5. Differentiate between data and information

- Data:
  - Raw facts of things
  - Meaning less
  - Just number and text
- Information:
  - Meaningful or understandable
  - Processed data and organize context

6. What is the definition of Software Engineering by IEEE?

The definition of Software Engineering by IEEE is:

The application of a systematic, discipline, quantifiable use for development operation maintenance for software.

7. Explain the term disciplined freedom.

The term of discipline freedom are:

- The systematic, disciplined and quantifiable approach of one team not be suitable for another team
- the approaches have to be customized according to project nature and
- needs
- Process can provide flexible approach

8. What are the components of Task Set?

- A task set defines the actual work to be done to accomplish the objectives of a software engineering action
- Task Set consists of Work Task, Work Product, Milestone and QA Points
- Task sets are created according to the needs of the project & characteristics of the tea

9. What is the difference between process framework and umbrella activities?

❖ Umbrella activities include:

- Risk management
- Software quality assurance(SQA)
- Software configuration management(SCM)
- Measurement
- Formal technical reviews(FTR)

❖ Process Framework

**Software Process Framework** is a foundation of complete software engineering processes. **Software process framework** includes all sets of umbrella activities. It also includes a number of framework activities that are applicable to all software projects.

- **Communication:**

In this activity, heavy communication with customers and other stakeholders, requirement gathering is done.

- **Planning:**

In this activity, we discuss the technical related tasks, work schedule, risks, required resources etc.

- **Modeling:**

Modeling is about building representations of things in the 'real world'. In modeling activity, a product's model is created in order to better understand and meet requirements.

- **Construction:**

In software engineering, construction is the application of set of procedures that are needed to assemble the product. In this activity, we generate the code and test the product in order to make a better product.

- **Deployment:**

In this activity, complete or non-complete products or software are represented to the customers to evaluate and give feedback. on the basis of their feedback we modify the products to supply better products.

10. Write any two myths faced in management and explain the reality also.

❑ **Myth #1: Manager makes more money than individual contributors**

**Reality:** Most of you think that, right? But it actually depends. And also do not forget the real hours they have to work. With different kinds of jobs such as sales, artists, athletes, etc, an outstanding individual contributor at least could earn equal to a manager. Management now is only seen as a job that needs some specific skills and not necessarily to have to be the best one.

❑ **Myth #2: A manager is an employee who has the best performance.**

**Reality:** As an illustration, the best athletes don't make the best coaches. If you promote a staff because of his good results, maybe you're making a bad decision. Leading a group of people needs much more than specialized knowledge. You will meet a lot of

obstacles and challenges which cannot be overcome without management skills and ability to make a decision under the high pressure.