➢ Short Answer:

1. **What is the difference between software engineering and computer science?**

Ans –

Computer Science

Software Engineering

Computer Science	Software Engineering
Analytical Skills	Multitask
Problem Solving Skills	Teamwork
Creativity	Attention to Details
Critical Thinking Skills	Computer Coding Languages
Resilience	

2. **What are the attributes of good software?**

Ans - Good software should deliver the required functionality and performance to the user and should be maintainable, dependable, and usable.

3. **What are the fundamental software engineering activities?**

Ans- Software specification, software development, software validation, and software evolution.

4. **What are the difference between program and software?**

Ans –

Difference between program and software:

program	software
1) Small in size.	1) Large in size
2) Authors himself is user-soul.	2) Large number
3) Single developer.	3) Team developer
4) Adopt development.	4) Systematic development
5) Lack proper interface.	5) Well define interface
6) Large proper documentation.	6) Well documented.

5. **Write any 5 challenges of Software engineering.**

Ans - Top 10 Challenges in Software Engineering:

1. Requirement volatility:
2. Limited budget and resources:
3. Lack of communication and collaboration:
4. Poor software quality and maintenance: Integration and compatibility issues
5. Technical debt management
6. Managing complex codebases
7. Inadequate testing and debugging
8. Security and privacy concerns
9. Adapting to changing technology and industry trends
10. Integration and compatibility issues

➢ **LONG ANSWER:**

6. **What is Software requirement specification (SRS)? List any 5 characteristics of SRS.**

Ans - Software requirement specification (SRS):

Definition- SRS is a complete reading base documentation focus on the particular desired software to the specific client or customer. After collecting the necessary data from SDLC we have to summarize the useful and appropriate data for making desired software. SRS has some objectives which is help to the software developer as well as the customer for making a successfully software.

Characteristics of SRS:

1) Complete
2) Traceable
3) Appropriate for the developer
4) Modifiable
5) Simple language
6) Software requirement view

7. **Differentiate between system analysis and system design.**

Ans -

System analysis	System design
1) System analysis is the examination of the problem. 2) It is concerned with identifying all constrains. 3) It deals with data collection and a datelined evaluation of existing file. 4) In system analysis part the main focus on data flow diagram and data dictionary.	1) System design is the creator of information system which is solution to the program. 2) It is concerned with co erudition of the activities for a particular system goal. 3) It deals with general design specification detailed design specification I/O files and procedures. It also deals with program construction testing and user acceptance. 4) It provides technical specification and reports by which problems can be trapped.

8. **Write a detail note on software engineering also include its specific phases.**

Ans- Software engineering is like building a house, but with software. It involves steps to plan, design, create, test, and maintain software products. Here are the key phases:

1. Requirements Gathering: Understanding what the customer needs from the software.

2. Design: Creating a blueprint for how the software will work and look.

3. Implementation/Coding: Writing the actual code based on the design.

4. Testing: Checking if the software works correctly and fixing any issues.

5. Deployment: Making the software available for users to use.

6. Maintenance: Keeping the software updated and fixing any problems that arise.

9. **What is system concepts in software engineering? Also mention difference between system analysis and system design.**

Ans - A system is a group of interrelated components working together towards a common goal, by accepting inputs and producing outputs in an organized transformation process. The interrelated components which are systematically arranged to form a system are called subsystems.

Set of instruction-> this is program.

Set of program-> software.

This software is a collection of computer programs, procedure, rules and associative documentation and data. Program is generally used the developer of a specific program to make a particular software.

System analysis	System design
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10. List 10 essential tasks that must be included in a software engineering project, and provide brief details for each

Ans - 1. Analysis of the Problem: Understanding what needs to be solved by the software.

2. Determination of Requirements: Figuring out what the software should do, based on the problem analysis.

3. Design of the Software: Planning how the software will be structured and function.

4. Coding of the Software Solution: Writing the actual code to implement the designed solution.

5. Testing and Integration of the Code: Checking if the code works correctly and combining different parts together.

6. Installation and Delivery of the Software: Making the software ready for use and delivering it to the users.

7. Documentation: Creating guides and manuals to help users understand and use the software.

8. Maintenance: Keeping the software updated and fixing any issues that arise.

9. Quality Assurance: Making sure that the software meets quality standards.

10. Training: Teaching users or stakeholders how to use the software effectively.

THANK YOUUUUU

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