#### Q1. What is proprietary software?

### ANS:

Proprietary software refers to any computer software that has restrictions on any combination of the usage, modification, copying or distributing modified versions of the software.

Proprietary software usually can be distributed at no cost or for a fee.

Proprietary software may also be called closed-source software.

#### Q2. What are the enterprise applications of software?

#### ANS:

Some of the more common enterprise applications include the following:

- 1. Automated billing systems.
- 2. Payment processing.
- 3. Email marketing systems.
- 4. Customer Relationship Management (CRM)
- 5. Enterprise Resource Planning (ERP)
- 6. Business Intelligence (BI)
- 7. Business Continuity Planning (BCP)
- 8. Enterprise Application Integration (EAI)

#### Q3. What is SRS?

# ANS:

SRS or Software Requirement Specification is a document produced at the time of requirement gathering process. It can be also seen as a process of refining requirements and documenting them.

### Q4. Mentions some software analysis & design tools?

## ANS:

These can be: DFDs (Data Flow Diagrams), Structured Charts, Structured English, Data Dictionary, HIPO (Hierarchical Input Process Output) diagrams, ER (Entity Relationship) Diagrams and Decision tables.

#### Q5. What are various types of software maintenance?

# ANS:

Maintenance types are: corrective, adaptive, perfective and preventive.

#### 1. Corrective:

Removing errors spotted by users

#### 2. Adaptive:

tackling the changes in the hardware and software environment where the software works

#### 3. Perfective maintenance:

implementing changes in existing or new requirements of user

#### 4. Preventive maintenance:

taking appropriate measures to avoid future problems

#### Q6. What is software process or Software Development Life Cycle (SDLC)?

#### ANS:

Software Development Life Cycle, or software process is the systematic development of software by following every stage in the development process namely, Requirement

Gathering, System Analysis, Design, Coding, Testing, Maintenance and Documentation in that order.

#### Q7. What are various phases of SDLC?

### **ANS**:

The generic phases of SDLC are: Requirement Gathering, System Analysis and Design, Coding, Testing and implementation. The phases depend upon the model we choose to develop software.

#### Q8. What is software scope?

### ANS:

Software scope is a well-defined boundary, which encompasses all the activities that are done to develop and deliver the software product.

The software scope clearly defines all functionalities and artifacts to be delivered as a part of the software. The scope identifies what the product will do and what it will not do, what the end product will contain and what it will not contain.

#### Q9. What is Software configuration management?

# ANS:

Software Configuration management is a process of tracking and controlling the changes in software in terms of the requirements, design, functions and development of the product.

#### Q10. What are software requirements?

### ANS:

Software requirements are functional description of proposed software system. Requirements are assumed to be the description of target system, its functionalities and features. Requirements convey the expectations of users from the system.

#### Q11. What is software metric?

### ANS:

Software Metrics provide measures for various aspects of software process and software product. They are divided into:

- 1. Requirement metrics: Length requirements, completeness
- **2. Product metrics:** Lines of Code, Object oriented metrics, design and test metrics
- **3. Process metrics:** Evaluate and track budget, schedule, human resource.

#### Q12. What is structured design?

## ANS:

Structured design is a conceptualization of problem into several well-organized elements of solution. It is concern with the solution design and based on divide and conquer strategy.

# Q13. Briefly define top- down and bottom- up design model.

## ANS:

Top-down model starts with generalized view of system and decomposes it to more specific ones, whereas bottom-up model starts with most specific and basic components first and keeps composing the components to get higher level of abstraction.

Q14. What is the difference between function oriented and object oriented design?

### ANS:

**Function-oriented design** is comprised of many smaller sub-systems known as functions. Each function is capable of performing significant task in the system.

**Object oriented design** works around the real world objects (entities), their classes (categories) and methods operating on objects (functions).

Q15. What is black-box and white-box testing?

### ANS:

**Black-box testing** checks if the desired outputs are produced when valid input values are given. It does not verify the actual implementation of the program.

White-box testing not only checks for desired and valid output when valid input is provided but also it checks if the code is implemented correctly.