**Topic**: AWS Assessment

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1. a
2. c
3. c
4. b
5. b
6. d
7. b
8. b
9. b
10. d
11. b
12. a
13. a
14. c
15. c
16. b
17. a
18. b
19. a
20. b
21. c
22. a
23. c
24. d
25. b
26. b
27. a
28. a
29. a
30. a
31. **Software Development Life Cycle(SDLC)**:- The Software Development life cycle is a process of structured that defines the stages involved in developing software. It Ensures that the Software is high quality , meets cutomer reqirements, and is deliverd within time and cost.

**Phases in software development life cycle**:

**Planning:** Define what we want to build and how we’ll do it like project scope, goals, time and budget.

**Requirement Gathering**: collect and document software requirements from stakeholders.

**Design:** Create a architectural and detailed design for the Software.

**Introduction to DevOps:** in this phase developer’s write the code.

**Testing Phase:** Verify the software is meets requirements through various testing techniques.

**Deployment**: Deliver software to production and make it available to end-users.

**Maintenance:** Support and update Software to ensure it continues to meet changing user needs.

1. The main objective s of the Requirements Gathering phase:-

* Businesses Analyst, Project Manager , Stakeholders, End-users, Quality Assurance Team, Product owner involved in this phase.
* Collect requirements, Define project Scope, understand User needs, Identify Functional requirements and non-functional requirements, identify the most critical and high-priority requirements. also Gathering all stakeholders have a common understanding of the requirements and provide a solid foundation for design phase.

1. Design Phase in SDLC Process:

* Translation of requirements: The Design Phase translate the gathered information into a detailed and actionable plan.
* Architecture and infrastructure: Defines the overall system architecture , infrastructure, and components.
* UX and UI: creates prototype, visualize systems
* System Integration: outline how different components and system will integrate and interact.
* Define the Database
* Provides a estimating costs , allocating resource’s and creating a project shedual.
* Helps identify the risk management
* Foundation for development phase.

1. Differentiate between Waterfall and Agile methodologies in SDLC: