1. Who is a Business Analyst?

Answers: A Business Analyst (BA) is a professional who acts as a bridge between business teams and technical teams in an organization. Their main role is to understand the business problems and find solutions to improve processes or systems. BA typically Involves in understanding Requirements, analysing problems, defining solutions, creating documents and collaborating with the cross functional teams.

1. What are the Roles and Responsibilities of a BA?

Answers: The roles and responsibilities of a Business Analyst (BA) can vary depending on the organization and project, but generally include the following. Requirement Gathering and Analysis, Stakeholder Collaboration, Documentation, Testing and quality assurance & Training and Documentation.

1. What is BPM?

Answers: A Business Process Model (BPM) is a visual representation of the steps, tasks, and activities involved in a business process. It helps in understanding how a process works, identifying inefficiencies, and finding areas for improvement. BPM provides a clear picture of how workflows through an organization. Key Components of BPM

1. Has a Goal
2. Has specific Output
3. Has specific Input
4. User resources
5. Has a number of activities that are performed in some order.
6. Creates value of some kind of customers. The customer may be internal or external.
7. What is Scope Creep?

Answers: Scope Creep refers to the uncontrolled expansion of a project's scope after it has started, often without adjustments to time, budget, or resources. It happens when new requirements or changes are introduced during the project lifecycle, leading to delays, increased costs, and possible project failure.

**Causes of Scope Creep:**

* Undefined Requirements
* Stakeholder Demands
* Poor Change Management
* Lack of Communication

1. What is RUP?

Answers: Rational Unified Process (RUP) is a structured software development methodology designed to guide teams in planning, designing, building, and delivering high-quality software. It provides a systematic way to ensure software meets user needs while being delivered on time and within budget.

**Four Phases of RUP is as follows:**

* **Inception**: Define the project's vision, objectives, and scope.
* **Elaboration**: Identify key requirements, risks, and technical architecture.
* **Construction**: Build and develop the software system incrementally.
* **Transition**: Deploy the software to users and ensure it works as intended.

1. What is Waterfall Model?

Answers: The Waterfall Model is a traditional software development methodology that follows a linear, sequential approach. In this model, each phase of the project must be completed before moving on to the next, much like water flowing down a waterfall. It’s called “Waterfall” because each step flows downward into the next phase.

**Key Phases of the Waterfall Model:**

* Requirement gathering.
* Requirement Analysis.
* Design
* Development- Coding
* Testing
* Deployment & Maintance

1. What is Spiral Model?

Answers: The Spiral Model is a software development methodology that combines elements of both iterative and waterfall models. It focuses on risk management and allows for gradual development through repeated cycles or "spirals." Each spiral involves planning, risk analysis, engineering, testing, and customer evaluation.

1. What is Agile?

Answers: Agile is a modern software development methodology that follows Iterative approach. Unlike traditional methods (like Waterfall), Agile promotes iterative development, where software is developed and delivered in small, manageable chunks (called iterations or sprints), allowing teams to make adjustments based on real-time feedback and changing requirements.

1. What is Scrum?

Answers- Scrum is a popular Agile framework used for managing and completing complex projects, particularly in software development. It focuses on iterative progress, flexibility, collaboration, and delivering working software in short cycles called sprints. Scrum helps teams work together efficiently to meet customer needs and continuously improve the product.

1. What is Use case Diagram?

Answers: A Use Case Diagram is a visual representation of the functional requirements of a system, showing how users (or other systems) interact with the system to achieve specific goals. It’s part of the Unified Modelling Language (UML), a standardized visual modelling language used in software engineering. Use Case Diagrams help in understanding the system’s behaviour from the user's perspective, and they are often used in the early stages of software development to clarify system functionality.

**Key Components of a Use Case Diagram:**

* Actors (Primary Actors & Secondary Actors)
* Use Cases:
* System Boundary:
* Associations
* Include
* Extend
* Generalization

1. What is Sequence Diagram?

Answers: A Sequence Diagram is a type of UML (Unified Modelling Language) diagram that models the interactions between objects or components in a system over time. It shows how objects communicate with each other and the order in which messages are sent. Sequence diagrams are commonly used in software development to illustrate the sequence of steps involved in a particular use case or operation.

1. What is Activity Diagram?

Answers: An Activity Diagram is a type of UML (Unified Modelling Language) diagram used to model the dynamic aspects of a system. It represents workflows of activities and the flow of control or data between them, focusing on the sequence of actions or operations and how they are executed. Activity diagrams are often used to model business processes, workflows, and complex operations within a system.

1. What is RACI Matrix?

Answers: A RACI Matrix is a tool used to define roles and responsibilities within a project or process. The acronym RACI stands for **Responsible, Accountable, Consulted, and Informed**, which are the four key roles assigned to each task or deliverable. The matrix is used to clarify who is responsible for what, ensuring clear communication and preventing confusion in team roles.

**Components of a RACI Matrix**:

* Responsible (R)
* Accountable (A)
* Consulted (C)
* Informed (I)

1. What is Requirement Elicitation Techniques: -

Answers: Requirements Elicitation is the process of gathering, discovering, and documenting the requirements for a project or system from stakeholders. It's a crucial activity in the Business Analysis process because accurate and comprehensive requirements are essential to building a system that meets the business needs. There are several elicitation techniques used by Business Analysts (BAs) to collect this information from stakeholders, each with its strengths and weaknesses. Here are some common techniques:

* Interviews:
* Workshops:
* Surveys and Questionnaires:
* Observation:
* Document Analysis:
* Prototyping:
* Focus Groups:
* Brainstorming:

1. What is MoSCoW Technique?

Answers: The MoSCoW technique is a prioritization method used to determine the importance of requirements or features in a project. It helps teams decide which features to focus on first based on their significance, ensuring that the most critical aspects of the project are completed first. The name MoSCoW is an acronym derived from the first letter of each priority category:

* M - Must Have
* S - Should Have
* C - Could Have
* W – Would have

1. What is SWOT Analysis?

Answers: SWOT Analysis is a strategic planning tool used to identify and evaluate the Strengths, Weaknesses, Opportunities, and Threats of an organization, project, or business venture. It helps in understanding the internal and external factors that can impact the success of a project or organization.

1. What is GAP Analysis?

Answers: GAP Analysis is a method used to assess the difference (gap) between the current state and the desired future state of an organization or system. It helps identify where the organization is lacking or where improvements are needed.

**Steps in GAP Analysis:**

* Define Current State
* Define Future State
* Identify the Gap
* Develop an Action Plan

1. What is Feasibility Study?

Answers: A Feasibility Study is an analysis conducted to determine whether a proposed project or solution is viable, practical, and worth pursuing. It assesses various factors such as technical, financial, operational, and legal aspects to determine if the project can be successfully implemented.

**Key Components of a Feasibility Study:**

* Technical Feasibility
* Economic Feasibility
* Legal Feasibility
* Operational Feasibility

1. What is Fishbone Diagram?

Answers: The Fishbone Diagram, also known as an Ishikawa Diagram or Cause-and-Effect Diagram, is a visual tool used to identify, explore, and display the possible causes of a specific problem or effect. The diagram helps teams analyse the root causes of a problem systematically, which is especially useful in quality management, process improvement, and troubleshooting.

1. What is Product Backlog and Sprint Backlog?

Answers: In Agile methodology, specifically in Scrum, Product Backlog and Sprint Backlog are essential tools for managing and prioritizing the work required to deliver a product incrementally.

Product Backlog:

The Product Backlog is a dynamic, prioritized list of all the work (features, bug fixes, enhancements, etc.) that needs to be done to build or improve the product. It contains everything that the development team will work on throughout the life of the project. The backlog is continuously updated and refined (a process known as backlog grooming or refinement) to reflect the evolving needs and priorities of the product.

Sprint Backlog:

The Sprint Backlog is a subset of the Product Backlog and is the collection of tasks that the Scrum team commits to completing in a single Sprint (typically a 2-4 week time period). The Sprint Backlog represents the team's plan for delivering a specific set of features or improvements during the Sprint. It includes not just the user stories or features, but also the technical tasks required to implement those features.

1. What is Definition of Done (DoD) and (DoR)

Answers: - The Definition of Done (DoD) is a shared understanding among the Scrum Team of what it means for a Product Backlog Item (PBI) or user story to be considered complete. It sets the quality standards and ensures that work is finished to a specific level before it is considered “done.” This helps maintain consistency and quality across the team's work.

DoR (Definition of Ready):The Definition of Ready (DoR) is a set of criteria that a Product Backlog Item (PBI) or user story must meet before it can be taken into a Sprint or development cycle. It ensures that the work is well understood and can be worked on without significant ambiguity or uncertainty. The purpose of DoR is to ensure that the development team has all the necessary information, resources, and clarity to start working on a user story or task. It helps prevent teams from starting work that isn’t fully prepared or well-defined, reducing waste and confusion.