Brainstorming and JAD (Joint Application Development) sessions are both collaborative techniques, but they differ in purpose and structure. Brainstorming focuses on generating a wide range of ideas, while JAD sessions are more structured, aiming to define and refine requirements or solve problems collaboratively. JAD sessions also involve a wider range of stakeholders and a more defined process.

Feature	Brainstorming	JAD
Definition	Brainstorming is a creative group activity where participants generate as many ideas as possible in a free-flowing and non-judgmental environment.	JAD is a structured, facilitated workshop where business users, developers, and analysts come together to define requirements, resolve issues, or design solutions.
Purpose	To generate a large quantity of ideas, often in an unstructured or semi-structured way, without immediate judgment or criticism.	To collaboratively define and refine requirements, often for software development projects, or to solve specific problems.
Focus	Ideation, creativity, and quantity of ideas.	Structured problem-solving, requirements gathering, and achieving consensus.
Structure	Typically less formal, with a focus on free-flowing discussion and building on each other's suggestions	Highly structured, with a defined agenda, roles, and a facilitator.
Participants	Can involve a diverse group, but the emphasis is on generating ideas.	Include stakeholders, business analysts, subject matter experts, and sometimes developers or designers.
Output	A list of ideas, which may need further refinement or analysis	Documented requirements, design specifications, or decisions.

Goal	Generate ideas	Define detailed requirements

Q 2. Why Document Analysis is one of the compulsory technique we use in a Project? Justify

3 Marks

Document analysis is a crucial technique in project management because it provides a solid foundation for understanding project requirements, identifying potential issues, and ensuring alignment with existing business rules and processes. It helps in gathering background information, validating findings from other techniques, and saving time and resources by leveraging existing documentation.

Document Analysis is the technique of reviewing existing documentation to understand the current state of a system, process, or business domain.

This includes:

Business process documents
Policy manuals
User guides
System specifications
Contracts or legal documents
Reports or logs from existing systems

Here's why it's considered compulsory in many projects:

1. Understanding the Project's Context and History:

Background Information:

Document analysis provides a comprehensive understanding of the project's domain, including its goals, objectives, and past performance.

Learning from Past Projects:

Analyzing past project documentation, such as project plans, reports, and lessons learned, helps avoid repeating past mistakes and ensures the current project benefits from previous experiences.

Identifying Stakeholders:

Document analysis can reveal key stakeholders and their roles, ensuring that all relevant parties are involved in the project.

2. Eliciting Requirements and Validating Information:

Foundation for Elicitation:

Document analysis provides a starting point for requirements elicitation by identifying existing business rules, processes, and potential gaps in information.

Validating Findings:

It allows for cross-checking information gathered from other techniques like interviews and workshops, ensuring accuracy and consistency.

Addressing Information Gaps:

If stakeholders are unavailable or have limited knowledge, document analysis can fill in the gaps by providing valuable insights.

3. Ensuring Compliance and Efficiency:

Legal and Regulatory Requirements:

Document analysis helps identify and ensure compliance with relevant legal, regulatory, and contractual obligations.

Minimizing Rework:

By understanding existing requirements and processes, document analysis minimizes the risk of rework due to misunderstandings or errors.

Time and Cost Savings:

Leveraging existing documentation reduces the time and resources needed for requirements gathering and analysis, leading to increased efficiency.

4. Supporting Other Elicitation Techniques:

Informing Interviews and Workshops:

Document analysis can be used to prepare for interviews and workshops by providing background information and potential questions.

Validating Findings:

It serves as a reference point to validate information gathered through other elicitation techniques.

Facilitating Collaboration:

By providing a common understanding of the project context, document analysis can improve communication and collaboration among stakeholders.

In essence, document analysis acts as a foundational tool for understanding, planning, and executing projects effectively. It ensures that projects are well-informed, aligned with business needs, and less prone to errors or misunderstandings.

How document analysis helps business analysts?

Document analysis is an essential tool for business analysts to gather valuable insights and make informed decisions. By carefully examining various documents such as reports, contracts, and proposals, analysts can gain a deep understanding of the organization's processes, goals, and challenges.

One way document analysis benefits business analysts is by providing them with detailed information about current practices within the company. By studying internal documents like policies and procedures manuals or employee handbooks, analysts can identify areas for improvement or potential bottlenecks that may be hindering productivity.

Another advantage of document analysis is its ability to uncover trends and patterns over time. By reviewing historical data in financial statements or market research

reports, analysts can identify long-term growth opportunities or potential risks that need to be addressed.

Additionally, document analysis enables business analysts to identify inconsistencies or discrepancies between different sources of information. This allows them to validate data accuracy and ensure that decision-making is based on reliable facts rather than assumptions.

Document analysis empowers business analysts by providing them with comprehensive insights into the organization's operations. It equips them with the necessary knowledge to propose effective strategies and solutions for improving efficiency and driving success.

When to use document analysis

Document analysis is a valuable tool that can be utilized in various scenarios by business analysts. Understanding when to use document analysis can greatly enhance the effectiveness of their work.

One key instance where document analysis comes into play is during the initial stages of a project. When gathering requirements, business analysts may need to review existing documents such as user manuals, process flows, or technical specifications. By analyzing these documents, they can gain insights into current processes and identify areas for improvement.

Another situation where document analysis is useful is when conducting market research. Business analysts may study industry reports, competitor analyses, or customer surveys to understand market trends and consumer preferences. This information helps them make informed decisions about product development or marketing strategies.

Furthermore, document analysis proves beneficial during organizational change initiatives. Examining policies and procedures manuals enables analysts to assess how well an organization's practices align with its goals and objectives. This knowledge aids in identifying gaps and proposing changes for increased efficiency.

Additionally, when troubleshooting issues within a system or process, document analysis is crucial. By examining error logs or incident reports, business analysts can pinpoint patterns or root causes of problems faster and more accurately.

Knowing when to use document analysis empowers business analysts to extract meaningful insights from various sources of information throughout their projects. It allows them to make data-driven decisions leading towards improved outcomes

How to conduct document analysis

Conducting document analysis is an essential skill for business analysts. It allows them to extract valuable insights and information from various types of documents, such as reports, memos, contracts, and emails. Here are some steps to effectively conduct document analysis:

- 1. **Familiarize yourself with the documents:** Start by reviewing the documents thoroughly and understanding their context. Pay attention to key details like dates, authors, recipients, and any relevant attachments.
- 2. **Identify the purpose and audience:** Determine why the document was created and who it was intended for. This will help you understand its content better and analyze it from the right perspective.
- 3. **Highlight important information:** Use highlighting or underlining techniques to mark crucial points or data within the document. This will make it easier for you to refer back to specific sections later on.
- 4. **Categorize the information:** Organize the extracted information into categories based on relevance or themes that emerge from your analysis. This will enable you to spot patterns or trends more easily.
- 5. **Analyze for inconsistencies or gaps:** Look out for any discrepancies in data or missing pieces of information that could affect your overall understanding of the document's message.
- 6. **Assemble findings into a report:** Once you have completed your analysis, compile your findings into a comprehensive report that highlights key insights derived from each document analyzed.

By following these steps, business analysts can effectively conduct document analysis and gain deeper insights into their organization's operations, strategies, and decision-making processes.

Q3. In Which Context we will use Reverse Engineering? - 3 Marks

Reverse engineering for a business analyst is used to understand existing systems, products, or processes by analyzing their components and how they function. This technique is particularly helpful in situations where documentation is lacking,

requirements are unclear, or when a company needs to improve or replicate existing systems or products. It helps in clarifying requirements, planning projects, and migrating data. This technique is valuable for tasks like understanding how a software system works, identifying business rules, and analyzing competitor products.

Scenarios for Reverse Engineering

- Clarifying requirements to support existing functionality.
- Joining a project that involves adding or significantly altering an existing solution.
- Planning a project to completely update an outdated system.
- The client has an old system, and you are introducing your ready-made product for a complete replacement.
- Developing requirements for data migration between two active systems.
- Formulating requirements for the integration of existing solutions.
- Conducting a detailed analysis of a competitor's product to understand its useful features and how they work.

All of these tasks share one key characteristic: to execute them successfully, it's essential to have up-to-date system requirements (ideally). Based on a reliable and profound understanding of the existing system (As-Is), the business analyst can formulate a new set of requirements.

Benefits of Reverse Engineering in Business Analysis

- **Competitive Advantage**: Gaining insights into competitors' products and strategies can help businesses stay ahead in the market.
- **Innovation and Improvement**: Understanding existing designs and processes can inspire new ideas and lead to significant enhancements.
- **Cost Savings**: Identifying inefficiencies and opportunities for optimization can reduce operational costs.
- **Knowledge Retention**: Creating detailed documentation ensures that valuable knowledge is retained within the organization.
- Strategic Planning: Informed decisions based on detailed analysis can lead to more effective strategic planning and execution.
 Challenges and Considerations

- **Legal and Ethical Issues**: Reverse engineering must be conducted within the bounds of intellectual property laws and ethical guidelines.
- **Complexity**: The process can be technically complex and resource-intensive, requiring skilled personnel and sophisticated tools.
- Accuracy: Ensuring that the reconstructed model accurately represents the original can be challenging.

Where reverse engineering is useful for a business analyst:

1. Understanding Existing Systems:

When Documentation is Missing or Outdated:

If a system lacks proper documentation or the existing documentation is inaccurate, reverse engineering can help the business analyst understand the system's functionality, data flows, and business rules.

To Clarify Requirements for Enhancements or Modifications:

Before making changes to a system, a business analyst can use reverse engineering to understand the current state of the system and identify potential impacts of the proposed changes.

To Identify Potential Issues or Inefficiencies:

By analyzing the system's behavior, a business analyst can identify bottlenecks, errors, or areas for improvement.

2. Competitor Analysis:

Analyzing Competitor Products:

Reverse engineering allows a business analyst to examine a competitor's product, understand its features, functionality, and design, and potentially identify opportunities to improve their own products or processes.

Understanding Market Trends:

By analyzing competitor products, a business analyst can gain insights into current market trends and customer preferences.

3. System Migration and Integration:

Data Migration:

When migrating data between systems, reverse engineering can help understand the structure and relationships within the source system to ensure a smooth transition.

System Integration:

Reverse engineering can be used to understand how different systems interact and to identify potential integration points or challenges.

4. Security Assessments:

Vulnerability Identification:

Reverse engineering can help identify potential security vulnerabilities in a system by analyzing its code or design.

Building Security Defenses:

By understanding how attacks are executed, reverse engineering can help develop more effective security measures.

5. Product Development:

Creating Replicas:

Reverse engineering can be used to create a digital model of an existing product for various purposes, such as creating replacement parts or developing similar products. **Improving Existing Products:**

By analyzing the design and functionality of an existing product, a business analyst can identify areas for improvement and contribute to the development of a better product.

In essence, reverse engineering is a valuable tool for a business analyst to gain a deep understanding of existing systems, products, and processes, enabling them to make informed decisions, improve efficiency, and drive innovation.

Q4. What is the difference between Brainstorming and Focus Groups? - 3 Marks

Brainstorming and focus groups are both methods for gathering information, but they differ in their primary purpose and approach. Brainstorming focuses on generating a large quantity of ideas, while focus groups aim to gather in-depth feedback and opinions on a specific topic or concept. Brainstorming is typically used early in a project to explore possibilities, while focus groups are often used later to refine ideas or assess a product or service.

Feature	Brainstorming	Focus Groups
Definition	A creative thinking technique used to generate a large number of ideas or solutions in a short time.	A structured discussion led by a facilitator to gather opinions, perceptions, and feedback about a product, feature, or system from a target user group.

Purpose	To generate a wide range of ideas, often with the goal of finding new solutions to a problem or exploring different angles of a concept. To gather in-depth feedback a opinions from a specific targe audience about a product, se or concept.	
Focus	Broad range of ideas	Specific topic or concept
Structure	Informal,open discussion	Formal,guided discussion
Participants	Team, stakeholder (internal)	Real user, customer (internal and external)
Output	A list of potential ideas, which can then be further evaluated and refined.	Qualitative data in the form of opinions, perceptions, and attitudes from the participants
Goal	Generate many ideas Gather opinion and user insig	
Approach	Typically involves a group of individuals with diverse perspectives, who are encouraged to share any idea that comes to mind, without judgment or criticism.	Involves a small group of carefully selected participants who are guided by a moderator through a discussion about the topic at hand.
Timing	Often used early in a project	Often used later in a project
Moderation	Facilitator guides the process	Moderator guides the discussion
When a BA uses it:	During early stages of requirement gathering To find solution options for a problem To define new features or products	To validate requirements or designs To understand user expectations To test ideas or prototypes before finalizing

Q5. Observation Technique – Explain both Active and Passive approaches - 3 Marks

Observation in requirements gathering is a technique where analysts watch users or stakeholders in their natural environment to understand their needs and behaviors. It involves observing how users perform tasks, interact with systems, and solve problems, providing insights that can be missed through other methods like interviews. This technique is particularly useful for understanding implicit requirements, identifying pain points, and gaining a holistic view of the context surrounding the system.

Types of Observation:

Passive Observation:

Analysts observe without interacting with the users. This can be useful for understanding natural workflows and identifying potential issues without influencing user behavior.

Benefits to Passive Observation

Allows the flow of events to be observed naturally Enables the recording of timing and how long it takes to complete certain actions

Constraints to Passive Observation

Delays answers, clarifications, opinions, and insights until sometime after the session Often requires more detailed notes to understand the context of what was happening at the time and form proper, useful questions

Active Observation:

Analysts interact with users, asking questions and potentially role-playing to gain deeper insights into their tasks and challenges.

Benefits to Active Observation

Facilitates quick answers, clarifications, opinions, and insights Enables the quick understanding and reasoning behind certain steps and processes

Constraints to Active Observation

Users are not as efficient and productive due to workflow interruptions and interferences Many observees get nervous and may perform the tasks differently than they typically do, providing misleading information

Benefits of Observation:

Reveals Implicit Requirements:

Observation can uncover requirements that users may not be aware of or able to articulate.

Provides Context:

It helps understand the environment and constraints within which the system will be used.

Identifies Pain Points:

By observing user behavior, analysts can identify areas where users struggle or encounter problems.

Validates Other Requirements:

Observation can be used to verify the accuracy of information gathered through other methods.

Challenges of Observation:

Time-Consuming:

Observation can be time-intensive, requiring analysts to spend significant time observing users.

Potential for Bias:

Analysts need to be aware of their own biases and strive to remain objective during observation.

Requires Planning:

Effective observation requires careful planning, including defining goals, selecting participants, and choosing the right observation method.

Ethical Considerations:

It's important to respect user privacy and obtain informed consent before conducting observations.

When to use Observation:

Improving Existing Systems: When seeking to enhance an existing product or process. Stakeholders Struggle to Articulate Needs: When users have difficulty expressing their requirements.

Repetitive Tasks:

When observing repetitive tasks or processes.

Validating Other Data:

When you need to confirm the accuracy of information gathered through other means. By effectively utilizing observation techniques, analysts can gain a deeper understanding of user needs and behaviors, leading to more successful and user-friendly systems.

Q6. How do you conduct the Requirements Workshop- 3 Marks

A requirements workshop is a structured meeting to gather and define project requirements from stakeholders. Key steps include defining the workshop's purpose, identifying participants, creating an agenda, facilitating discussions, documenting outcomes, and following up. It's crucial to foster a collaborative environment, use various elicitation techniques, and ensure clear communication throughout the process. A requirements-gathering workshop is a structured, interactive session where business analysts, system analysts and project managers collaboratively work with stakeholders to identify, refine and document the essential project requirements.

Unlike conventional methods that rely on static documents, workshops provide a real-time platform for stakeholders to engage in open discussions, fostering a deeper understanding of the project's objectives and scope.

It allows all parties involved to go the extra mile to meet the client's needs and build a comprehensive understanding of their business objectives.

Purpose of a Requirements Workshop

Elicit detailed requirements quickly
Align all stakeholders on goals and scope
Resolve conflicts in requirements
Validate existing documentation
Get quick feedback from all parties

Here's a more detailed breakdown:

1. Planning and Preparation:

Define Objectives:

Clearly state the purpose of the workshop and what you aim to achieve (e.g., identify key features, define user roles, understand business needs).

Identify Participants:

Determine who needs to be involved to represent all relevant perspectives and expertise. This includes stakeholders from various departments and potentially external users.

Invite the right participants:

Business users

Product owner Developers QA/testers SMEs

Create a Detailed Agenda:

Structure the workshop with clear timelines, topics, and activities. Include time for introductions, presentations, discussions, and documentation.

Prepare Materials:

Gather necessary tools and resources like whiteboards, sticky notes, presentation slides, and templates for documenting requirements.

Set Ground Rules:

Establish clear expectations for participation, communication, and decision-making.

Confirm Logistics:

Secure a suitable location, arrange for any required technology, and ensure all participants are aware of the meeting details.

Share Pre-reading Materials:

Provide stakeholders with relevant background information and documents to ensure everyone is on the same page.

2. Conducting the Workshop:

Facilitate the Meeting:

The facilitator guides the discussion, ensures everyone has a chance to speak, manages time, and keeps the conversation focused on the agenda.

Encourage Participation:

Use various techniques to encourage active participation, such as brainstorming, open-ended questions, and group activities.

Elicit Requirements:

Employ various techniques to gather requirements, including:

- **Brainstorming:** Generating a wide range of ideas and possibilities.
- **User Stories:** Describing requirements from the user's perspective.
- Use Cases: Detailing how users interact with the system.

- **Prototyping:** Creating mockups or prototypes to visualize the system.
- Document Analysis: Reviewing existing documentation (manuals, specifications, etc.).
- **Interviews:** Conducting one-on-one conversations with stakeholders.
- Observation: Observing users in their work environment.

Capture Key Information:

Use a scribe to document all requirements, decisions, and action items.

Summarize and Validate:

Regularly summarize key points and decisions to ensure everyone is aligned and understands the requirements.

Manage Time and Scope:

Keep the workshop on track and manage scope creep by deferring unrelated issues to a "parking lot" or future discussion.

Resolve Conflicts:

Address any disagreements or conflicts constructively and find solutions that satisfy the needs of all stakeholders.

3. Follow-up and Documentation:

Distribute Meeting Summary:

Share a meeting summary with all participants, including action items, decisions, and next steps.

Assign Responsibilities:

Clearly assign ownership for each action item and set deadlines for completion.

Update Requirements Documents:

Incorporate the workshop outcomes into the project's requirements documentation.

Track Progress:

Monitor the progress of action items and follow up with responsible parties to ensure timely completion.

By following these steps, you can conduct a successful requirements workshop that effectively gathers and defines the needs of your project stakeholders.

When to use a requirements workshop?

Requirements workshops are a focused event that is particularly effective in complex projects where multiple perspectives, diverse requirements and potential conflicts need to be addressed (e.g. high-impact projects where knowledge is shared across several stakeholders).

Engaging stakeholders early in the project lifecycle, especially during the planning and initiation phases, ensures that their insights and ideas are incorporated into the project's foundation.

The workshops prove invaluable in aligning expectations, meeting them, mitigating risks and fostering a sense of ownership among stakeholders and are particularly effective when all parties are present in the same room to generate ideas and refine the business case.

What are the benefits of requirements workshops?

Some of the key benefits of requirements workshops include:

- **Improved collaboration:** By promoting open communication, this approach results in a more comprehensive understanding of the project's requirements.
- Efficiency and time savings: Instead of relying on back-and-forth communication through documentation, stakeholders and attendees can address concerns, resolve issues and make decisions on the spot.
- Reduced ambiguity: Interactive discussions in workshops help clarify ambiguous requirements and uncover hidden assumptions. This leads to more precise and well-defined knowledge of project requirements, reducing the likelihood of misunderstandings.
- Early issue identification: By engaging stakeholders early in the project lifecycle, requirements workshops facilitate the identification of potential issues and risks, helping to prioritise and address challenges before they escalate.
- **Increased stakeholder buy-in:** When stakeholders see their input reflected in the project's direction, they are more likely to support its success.
- Alignment of expectations: This alignment reduces the likelihood of scope creep and enhances the overall success of the project.

Q7. In which context, Interview Technique can be conducted by a BA? How may approaches are there in conducting Interviews? (Structured – Unstructured) Explain them.

Explain the difference between Open Ended Questions and Closed ended Questions – 6Marks

Interviews

A great way to extract critical data is via interviews. Business analysts engage in group or one-to-one interviews in an informal or formal setting to elicit project requirements through questions directed at Subject Matter Experts, stakeholders, and end-users. By exploring diverse opinions, business analysts gain in-depth knowledge of the requirements. Interviews offer a business analyst an opportunity to establish rapport with the interviewee and get instant feedback.

Interviews used in:

Requirements Elicitation:

Gathering detailed information about what a system or process should do from stakeholders.

Stakeholder Analysis:

Understanding the needs, expectations, and influence of different stakeholders.

Business Process Analysis:

Identifying pain points, inefficiencies, and opportunities for improvement within a business process.

Solution Validation:

Confirming that proposed solutions meet the identified requirements.

User Research:

Gaining insights into user behavior, needs, and pain points related to a product or service.

A Business Analyst (BA) can use interview techniques in various contexts, primarily to gather requirements, understand stakeholder needs, and elicit information for business analysis. There are two main interview approaches: structured and unstructured.

What is a structured interview?

As the name suggests, a structured interview has structure. It is a set of sequential, close-ended questions, where all interviewees are asked the same set of questions with the same response choices. The answer selection may be presented as multiple choice, a sliding scale, or yes/no.

It is sometimes called a standardized interview because it uses the same set of questions for each person and gathers information using the same set of variables. Answers are assigned a numerical value, making it simple to run data analysis.

Characteristics of a structured interview

Structured interviews make it easy for an interviewer since all the questions are the same with the same choices of responses. It allows for consistency and diminishes redundancy. Other characteristics include:

- Mainly quantitative data is gathered
- Easy to compile and replicate
- Sequential, asking the same questions in the same order each time
- Close-ended questions, such as multiple choice, point scale, sliding scale, or true/false
- Standardized, unbiased data

Advantages of a structured interview

Structured interviews are an easy way to gather data from standardized questions. Advantages include:

Data collection and comparison are easy since all responses are quantitative.
 This allows you to compare all answers from the same set of possible responses throughout multiple interviews.

- Minimized the risk of leaving out important questions as the questionnaire is structured and uniform.
- Less opportunity for bias or favoritism.
- The interviewer can focus on the data instead of the interviewee or their personality.
- Less time is needed than for unstructured interviews, since the answers are close-ended and responses are readily available from a list of options, helping most respondents give a quick answer.

Disadvantages of a structured interview

Structured interviews have downsides too, including:

- More preparation time is needed. To make sure your questions are comprehensive and nothing is left out from the interview that will be used for all respondents, additional time may be needed to be sure that it is inclusive and that the results will yield the data that you need.
- Rating answers or simply answering with yes or no limits the respondent, who
 doesn't have the opportunity to answer in depth. If more information is needed
 after the initial response, you may need to arrange an additional interview.
- Can be seen as impersonal.
- Respondents may feel their opinions are not valued.

What is an unstructured interview?

While structured interviews rely on standardized questions, unstructured interviews are quite the opposite. The interviewer may rely on spontaneity and ask questions about the topic being researched. It is more conversational, less formal, and usually more relaxed.

Questions are unprepared, but the interviewer must know the subject to present relevant questions. Interviewees are often less prepared for unstructured interviews since answers require thought and often opinion.

Unstructured interviews ask open-ended questions and feel more friendly than structured interviews.

Characteristics of an unstructured interview

Unstructured interviews rely on questions asked at the discretion of the interviewer. They are not standardized so can be very different across respondents. Other characteristics include:

- Informal approach
- Flexibility, because the interviewer can adapt and change the follow-up questions, depending on the interviewee's responses
- Answers to unstructured interview questions are usually open-ended and based on personal preference or opinion
- Questions asked in an unstructured interview require spontaneity and thoughtful responses
- Descriptive in nature and a method of qualitative observation

Disadvantages of unstructured interviews

While unstructured interviews allow more flexibility than a more structured approach, there are some disadvantages to this approach. These include:

- Issues can arise when questions are not prepared in advance. You may forget to ask a question, get distracted, or let your bias stand in the way of gathering your data.
- Some interview respondents are not comfortable with open-ended questions and may struggle with accuracy or ease of response.

- Though time is saved during preparation, the interview itself can be more time-consuming.
- The questions are not standardized and the order they are asked may be out of sequence which can lead to confusion.
- They can generate large amounts of data that is not standard, making it hard to analyze the information gathered and use it effectively.

Open-ended questions and Close-ended questions

Open-ended questions encourage detailed, narrative responses, allowing respondents to elaborate in their own words. Closed-ended questions, on the other hand, offer a limited set of predefined answers, like multiple choice or yes/no, making them easier and faster to answer.

Open-ended questions are designed to gather rich, qualitative data and explore a respondent's perspective in depth. They typically start with words like "how," "what," "why," or "describe" and encourage the respondent to provide more than just a simple answer.

Examples of open-ended questions:

- "What are your thoughts on the new product?"
- "How would you describe your experience with our customer service?"
- "Why do you prefer this brand over others?"
- "What are your biggest concerns about [topic]?"

Closed-ended questions are useful for gathering quantifiable data and for situations where a quick, simple answer is needed. They limit the response options, making data analysis more straightforward.

Examples of closed-ended questions:

- "Do you like the new product? (Yes/No)"
- "How satisfied are you with our customer service? (1-5)"
- "Which of these features do you find most useful? (Multiple choice)"
- "Is this your first time using this product? (Yes/No)"

Q8. Questionnaire Technique – Where we will use? Give one example - 6 Marks

The questionnaire technique is used to gather information from a defined group of people through a series of structured or unstructured questions. It's widely employed by Business Analysts to understand user needs, gather requirements, and assess the effectiveness of existing systems or processes. A key example for a Business Analyst is using a questionnaire to collect feedback on a new software application from its intended users.

The Questionnaire Technique is used by Business Analysts when they need to gather information from many stakeholders in a fast, standardized, and cost-effective way, especially when direct interactions (like interviews or workshops) are not possible.

Where Do We Use the Questionnaire Technique?

Common Uses:

- 1. Large user groups When it is not practical to talk to everyone individually
- 2. Geographically distributed stakeholders When people are located in different places or time zones
- 3. Time or budget constraints When meetings or workshops are not feasible
- 4. Need for quantifiable data To analyze trends and preferences across users
- 5. Requirement validation or discovery To support or verify earlier findings

Where it's used:

Requirements Gathering:

Questionnaires help identify user needs, preferences, and expectations for a new product or system.

Process Improvement:

They can be used to assess the efficiency and effectiveness of existing business processes, identifying areas that need improvement.

System Evaluation:

Questionnaires can gather feedback on the usability and functionality of existing systems, helping to identify bugs, usability issues, and areas for enhancement.

Market Research:

Businesses use questionnaires to understand customer preferences, market trends, and competitor analysis.

User Acceptance Testing (UAT):

Questionnaires can be used during UAT to gather feedback from users on the system's functionality and usability before it is officially launched.

Example for a Business Analyst:

A Business Analyst is working on a new project to develop a mobile banking application. To understand user needs and gather requirements, they distribute a questionnaire to a representative sample of potential users. Sends the questionnaire to a large group of customers through email or the website. The questionnaire includes a mix of question types:

Closed-ended questions:

These might ask users about their preferred banking features (e.g., "Do you prefer using mobile check deposit or mailing in a check?"), their satisfaction levels with current online banking (e.g., "How satisfied are you with our current online banking platform on a scale of 1-5?"), and their frequency of using different banking services (e.g., "How often do you check your account balance online?"). These questions provide quantifiable data that can be easily analyzed.

Open-ended questions:

These might ask users to describe their ideal mobile banking experience, or to suggest any features they would like to see in the new app. These questions provide qualitative insights that can help the BA understand user expectations in more detail.

Expected Outcome:

Clear data on feature usage

Suggestions and complaints in users' own words Insights into common issues and desired improvements

By analyzing the responses, the Business Analyst can gain valuable insights into user preferences, identify potential issues, and ensure the mobile banking application is designed to meet the needs of its target audience.

The Questionnaire Technique is useful when you need to:

Collect information from a large group Save time and cost Get both measurable data and user opinions

Q9. How to Sort the Requirements – Where we will use? Give one example - 5 Marks

Requirements can be sorted using various techniques to prioritize and organize them based on different criteria like criticality, stakeholder input, or functional/non-functional aspects, importance, relevance, and feasibility. This sorting helps in efficient project management, development, and testing by focusing efforts on the most crucial aspects first.

Below are the steps to write and sort requirements as a Business Analyst.

Step 1) Categorize the requirements.

Group the similar requirements in one category

Place specific requirements to its relevant categories.

For technical stakeholders, there should be technical requirement category, for non-technical stakeholders,s there should be a generic requirement category. Each organization should figure out which category suits their standards.

Categorization can also be done based on their types (functional versus business).

Step 2) Arrange requirements.

Gather and arrange requirements in a logical order. So when stakeholders review the requirements, it is easy to navigate and also identify missing items.

Step 3) Prepare a list.

Prepare a list of the requirements that are meant to be reviewed by specific stakeholders.

For example, if a stakeholder is from technical background then he would like to know only the technical aspect of the product.

Step 4) Use unique identifiers.

If tracing requirement to each other is difficult, then use unique identifiers, ease in traceability.

Step 5) Present requirement in stakeholders preferred method

In certain scenarios, you might have to present the same requirement in different ways for different stakeholders. For example, one stakeholder prefers a graphical format while the other prefers a structured sentence format.

Step 6) Prepare a table of content.

Create a table of content for all the requirements. It helps stakeholders to easily track requirements.

Step 7) Use Business Analysis tools.

Business Analysis tools that help in presenting and categorizing the requirements

Step 8) Organize requirement documents by process flow.

In your requirement document, remove all unnecessary requirements, and organize requirement documents by process flow.

Step 9) Map the requirements.

Map the requirements you have gathered to a particular step in a process flow, and this will help reviewers to relate requirements to process flow.

Functional Requirements (What the system should do)

Group	Requirement ID	Requirement Description
User Management	FR1	Users should be able to register with email and phone number

	FR2	Users should be able to log in and log out securely
	FR3	Users should be able to update their profile
Restaurant Listing & Search	FR4	Users should be able to search restaurants by cuisine, rating, and location
	FR5	Restaurants should be listed with name, image, and average delivery time
Order Management	FR6	Users should be able to add food items to a cart
	FR7	Users should be able to place orders using various payment methods
	FR8	Users should receive order confirmation with estimated delivery time
Delivery Tracking	FR9	Users should be able to track the delivery in real-time

Non-Functional Requirements (How the system should perform)

Group	Requirement ID	Requirement Description
Performance & Scalability	NFR1	The system should support 10,000 concurrent users
	NFR2	Search results should be returned within 2 seconds
Security	NFR3	Passwords should be stored using SHA-256 encryption
	NFR4	User data should be protected with

		role-based access control
Usability	NFR5	The application should be mobile-responsive and accessible
Availability	NFR6	The system should have 99.9% uptime monthly
Maintainabilit y	NFR7	The codebase should follow standard coding practices and be modular
Compliance	NFR8	The application should comply with GDPR and PCI-DSS standards

Q10. Prioritise the Requirements – –Where we will use? Give one example - 5 Marks

1. What is Requirement Prioritization?

Requirement prioritization is the process of deciding which requirements are most important and should be addressed first based on business value, urgency, risk, and feasibility.

It helps teams **focus on delivering maximum value early** and ensures critical features are not missed due to time or budget limits.

2. Where Do We Use It?

Requirement prioritization is used during:

- Requirement Analysis Phase
- Planning and Estimation
- Sprint Planning (Agile)
- Release Planning

When there is a conflict between stakeholders' needs

Especially useful when:

- There are limited resources
- The team must choose what to deliver first

What is the MoSCoW prioritization method?

MoSCoW prioritization is a tool for creating a hierarchy of priorities before and during a project. It stems from the Agile project management method, which aims to establish elements like product cost, quality, and project requirements as early as possible. MoSCoW is an acronym for "must-have," "should-have," "could-have," and "won't-have (this time)." Each item in the acronym denotes a category of prioritization. The idea is that items are categorized at the beginning of a project to clarify what is strictly necessary, what is desirable, and what the project can do without. Before we get deeper into the categories, let's take a look at where this method came from.

The MoSCoW method can be used to prioritize project requirements, product features, or any other project elements. When using the MoSCoW method, each element is assigned to one of the four prioritization categories based on its importance to the project. Now, let's take a closer look at the prioritization categories and how to use them.

What are the categories within the MoSCoW prioritization method?

As mentioned previously, the acronym "MoSCoW" stands for "must-have," "should-have," "could-have," and "won't-have (this time)."

- Must-have: These items are essential for the success of the project. There can be no compromise on whether they are included, because without them, the entire project would be meaningless. In short, this is a top-priority MoSCoW requirement.
- Should-have: These items are those that are important but not absolutely
 essential like those in the "must-have" category. Elements in this category are
 considered a secondary priority; that is, they are important, but not crucial to
 success.
- Could-have: These items would be nice to have but are not essential. Still less
 important than the two preceding categories, these elements are considered a
 third-level priority. If including them will have negative consequences on cost or
 meeting deadlines, they should be omitted. It is only when they don't negatively
 affect other project elements that they should be included.
- Won't-have (this time): These items are those that are not essential and can be excluded from the project without jeopardizing its success. Being the lowest

priority category, omitting them won't hurt the project and they can be included when project conditions are more favorable.

Example: MoSCoW Prioritization:

Let's say a project involves developing a mobile banking application. The requirements could be sorted using the MoSCoW method:

Must-have:

User authentication (login with username/password), account balance display, funds transfer. These are essential for the basic functionality of the app.

Should-have:

Biometric authentication (fingerprint/face ID), transaction history, push notifications. These are important features that enhance the user experience but are not critical for core functionality.

Could-have:

Chatbot support for customer service, personalized recommendations. These are desirable features that can be added later if time and resources permit.

Won't have:

Currently, it's decided not to include features like bill payments or investment options. This might be revisited in future versions.

By sorting requirements using techniques like MoSCoW, the project team can focus on building the core functionality first, then iteratively add enhanced features, ensuring that the most critical aspects are addressed early in the development lifecycle.

Requirement prioritization ensures that the most valuable, urgent, and feasible requirements are delivered **first**, making the project more effective and aligned with business goals.

Where it is used:

Software Development:

Prioritization helps teams decide which features to build first, manage development time and resources effectively, and deliver a usable product incrementally.

Project Management:

It helps in defining project scope, managing risks, and ensuring that the project stays on track and delivers value to stakeholders.

Product Management:

Prioritization guides product roadmaps, feature releases, and helps in making informed decisions about what to build next based on user needs and business goals.

Business Analysis:

It helps in identifying critical business needs, aligning stakeholder expectations, and ensuring that the implemented solutions address the most important business problems.

Q11. Weekly status reporting – How we will drive? 5 Marks

What is a Weekly Status Report?

A weekly status report, also known as a weekly check-in, is a communication tool that project managers use to keep tabs on their employees' work experiences. While a team lead can do a weekly status report in person, it's easier to do it online. Team members or employees will use the report to tell their boss about their emotional or project-based progress for the current week and for the upcoming week.

How is it advantageous?

Remote working causes many problems for a project manager. Understanding the needs of your team members and employees can be one of them.

A weekly project status report can be the answer to this problem. By asking employees a series of focused questions, a project manager can gain a better sense of any

emotional and work-related issues that may come up and get a better sense of what the updated project timeline is.

Fundamental Elements of a Weekly Status Report

Every effective project reporting structure needs certain core components to deliver maximum value. Let's explore these elements while highlighting a tool that's revolutionizing report preparation.

Typically, a well-rounded report includes:

- Summary of weekly accomplishments giving a rundown of completed tasks or achieved milestones,
- 2. Current status of ongoing tasks updating on in-progress work, noting any changes or adjustments.
- 3. Challenges or risks detailing issues encountered and any potential risks on the horizon.
- Upcoming tasks with a look ahead to planned activities or objectives for the coming week

Benefits of Reporting

Integrating regular status reporting into your workflow brings clear advantages that improve both individual performance and team dynamics. Here are some of the top advantages:

1. Easy Communications

Status reports keep everyone informed, reducing the need for <u>constant check-ins</u> and status meetings.

2. Improved Accountability

By clearly outlining tasks, deadlines, and progress, reporting fosters accountability among team members.

3. Goal Alignment

Frequent weekly updates help ensure that everyone remains focused on project goals, making it easier to adjust tasks as needed.

4. Early Problem Detection

Potential issues or bottlenecks are identified early, enabling prompt intervention.

5. Better Resource Management

Reports provide insights into how resources (like time, budget, and personnel) are being used, allowing for better allocation.

Weekly Status Reporting - How We Will Drive It

A Weekly Status Report is a tool used by Business Analysts or Project Managers to communicate progress, issues, risks, and next steps to stakeholders in a structured and consistent way.

How to Drive Weekly Status Reporting

1. Define the Reporting Format

Decide the structure of the report. Common sections include:

Project Overview / Objectives

Work Completed This Week

Work Planned for Next Week

Issues / Risks Identified

Dependencies

Milestones / Deadlines

Overall Project Health (RAG status: Red/Amber/Green)

Use a consistent template (Word, Excel, or PowerPoint).

2. Gather Weekly Updates

Collect input from:

Team members (Development, QA, Design)

Task trackers (e.g., JIRA, Trello, MS Project)

Stand-up meetings or daily syncs

Update:

What tasks were completed What is in progress What was delayed and why

3. Track Key Metrics and Milestones

Include:

% of work completed
Requirements signed off
Test cases passed
Upcoming deadlines
Use charts or visual indicators if needed.

4. Highlight Issues and Risks

Clearly state:

Issues: What is blocking progress? Risks: What may cause future delays?

Include:

Responsible person Action plan Status (Open/Closed)

5. Identify Next Steps / Plans for Next Week

Show what will happen next:
Tasks to start or continue
Approvals or sign-offs needed
Any planned meetings or reviews

6. Share with Stakeholders

Send it on a fixed day each week (e.g., every Friday afternoon or Monday morning). Delivery methods:

Email (with attachment or in body)
Project management tools (Confluence, SharePoint)
Weekly team meetings or stakeholder calls

7. Follow Up

Use the report to:
Drive discussions in meetings
Get decisions made
Assign ownership of risks or tasks
Keep everyone aligned

To drive weekly status reporting effectively:

- 1. Use a clear format
- 2. Gather data regularly
- 3. Be transparent about risks/issues
- 4. Share consistently
- 5. Use the report as a communication and action tool

Q12. Meeting Minutes Document – prepare one Sample -5 Marks

Project Name	Scrum Food
Meeting Name	Requirements review - check out process
Date	July 1,2025
Location	Chennai
Time	9.00 am 12.00 pm
Facilitator	Monisha (Business analyst)
	Rahul Mehta – Project Manager Anjali Iyer – UI/UX Designer
	Suresh Patil – Developer Kavitha Nair – QA Lead
Attendees	Priya Ramesh – SME (Sales & Checkout)

	Review functional requirements for th	e checkout pr	ocess
	Confirm user flow and screen transition	ons	
	3. Capture validation and business rules	3	
Agenda	4. Identify open issues and action items		
	Checkout Flow: Reviewed step-by-step confirmation.	process from	cart to order
	Guest Checkout: Confirmed as a require	ed feature.	
	Address Validation: Mandatory fields inconumber, and pincode.	clude name, ad	ddress, phone
	Payment Options: Initial release will incl on Delivery.	ude Credit Ca	rd, UPI, and Cash
	Discount Codes: Will be entered on the validation.	payment scre	en with backend
Discussion summary	Error Messages: Standardized message screens.	es must be co	nsistent across all
	Task	Owner	Due Date
Action items	Share updated screen wireframes Draft validation rules document Confirm backend logic for promo codes Compile and circulate meeting summary		2 July 2025 3 July 2025 3 July 2025 1 July 2025
	No login required for guest checkout.		
Decision	Delivery instructions to be added as an optional text box.		
made	Estimated delivery time to be shown before payment is made		

Next Meeting Plan

Date	July 8,2025
Time	9.00 am 12.00 pm
Location	Chennai
Agenda	Finalize test scenarios and review UI mockups for the checkout flow

Q13. Change Tracker – Document - – prepare one Sample -4 Marks

Project Name	Online Agriculture store
Module Name	Payment gateway
Date	July 1,2025
Prepared by	Monisha
version	1.1
Change details	
Change request number	CR-2025-04
Requested by	Rahul - Product owner
Date requested	June 28,2025
Change description	Add EMI (Equated Monthly Installment) option to the payment methods available at checkout.
Change Assessment	Enhancement to payment feature; requires changes to UI and backend payment logic.
Impact analysis	Affects check out UI, Impacts payment integration,May affect existing test cases and validation

Feasibility		
analysis	Technically feasible; EMI option supported by Razorpay.	
Risk analysis	Risk of payment failure if EMI setup is misconfigured,User confusion if terms are unclear	
Effort estimation	3 days for development , 2 days for testing,1 day for deployment and validation	
Approval date	June 30,2025	
Approval status	Approved	
Approvals		
Approver 1	Rahul Mehta – Product Owner	
Approver 2	Kavitha Nair – QA Lead	
Approver 3	Suresh Patil – Technical Lead	
Approval date	June 30,2025	
Reference	FRS Document v2.3 – Section 4.2	
Related documents	Payment Integration Design, User Story ID #US-119	
supporting materials	Razorpay EMI API Documentation, EMI UI Wireframe	
Implementation details		
Developer	Suresh Patel	
Start date	July 1,2025	
End date	July 3,2025	
Test coverage	Unit test, UAT testing for all payment types , Regression test	
Test results	Pass	
Deployment plan	Deployment on staging: 4 July 2025, Production release 6 july 2025	
Rollback Plan		
Rollback procedure	Revert to pre-deployment version from Git tag release_2.1	

Rollback date	Not yet
Rollback test plan	Retest payment module using baseline test cases
Rollback result	Not applicable yet
Document updates	
Document affected	Payment API Design Doc, FRS V2.3
Update	Added EMI option in payment method Updated payment workflow diagrams
Update date	5 July 2025
Updated by	Monisha

Q14. Difference between Traditional Development Model and Agile Development Models – 8 Marks

Parameters	Traditional Software Development	Agile Software Development
Model Preference	Relies on predictability and planning beforehand	Emphasizes adaptability through higher flexibility
Project Priorities	Strict plans to meet project requirements	Achieving maximum customer satisfaction with working software.
Team Communication	Written documentation and formal communication	Face-to-face communication for better collaboration

Parameters	Traditional Software Development	Agile Software Development
Model Preference	Relies on predictability and planning beforehand	Emphasizes adaptability through higher flexibility
Project Priorities	Strict plans to meet project requirements	Achieving maximum customer satisfaction with working software.
Team Communication	Written documentation and formal communication	Face-to-face communication for better collaboration
Project Planning	Longer phases for delivery with a rigid, near-unchangeable plan	Short sprints for planning and delivery with high adjustability throughout the project
Team Functionality	Functionally divided	Cross-functional
Team Organization	Hierarchically organized team	Teams are always self-organized
Recommended Project Scale	Small-Medium	Large-Scale
Development Model	Evolutionary delivery model	Life cycle model
User Requirements	Interactive inputs	Always defined before coding or implementation
Client Engagement	High	Low
Customer Involvement	Only before the project has started	Involved throughout nearly every process and also allowed to offer feedback
Escalation Management	Escalated to manager	Entire team resolves escalation issues together

Product or Process	Emphasizes the process	Emphasizes the product	
Test			
Documentation	Comprehensive test planning	Tests planned one sprint at a time	
	During the second of the secon		
Effort Estimation	Project managers offer estimates to get approval from the PO	Scrum masters facilitate	
LIIOIT ESTITIATION	to get approval from the FO	Scruit masters facilitate	
	Povious and approvals some		
Approvals and	Reviews and approvals come from the PO after the project is	Reviews done after each iteration for	
Reviews	over	improvement	
Approach	Iterative and incremental	Linear and sequential	
Scale of projects	Small and medium-scale	Large-scale	
, , , , , , , , , , , , , , , , , , ,			
Feature	Dynamic and changing		
requirements	throughout development	Clearly defined before development	
Cost and time	Variable and changing	Fixed and predictable	
Involvement of			
clients	High	Low	
	Incremental and continuous		
Development	release	Phasic and one big launch	
	Customers are involved		
Customer	throughout development for	Customers are involved at the initiation for	
Involvement	insights and feedback	insights and before the launch for feedback	

Model	Agile model favors adaption, Flexible	Traditional model favors anticipation, rigid
Team	Self-organizing, cross-functional, and collaborative	Traditional, departmental, and siloed
Documentation	Focus on working software and defining feature requirements	Comprehensive and extensive
Work management	Agile team decides and commits to the work and a Scrum Master facilitates meeting	Project manager decides the work and provides estimates

Stage	Agile	Waterfall
Planning	Identify small, discrete application changes to implement	Plan loosely defined changes
Analysis	Break work into discrete, easily managed tasks	Work to implement changes defined at a high level
Design	Focus on modular system designs and interfaces	No specific approach to system design
Implementati on	Implement changes incrementally and in small pieces	Pivot from one task to another until all planned changes are created
Testing	Test incrementally	Test all together failed tests result in rework of code implementation

Deployment	Deploy using gradual, iterative methods, like canary releases	Deploy cautiously deployment risk increases with a complex set of changes
Maintenance	Use feedback from production environment to guide next cycle of Agile development	Fix bugs identified in production this may take a long time due to slow speed of Waterfall development

Q15. Explain Brainstorming Technique – Where to use? 5 Marks

Brainstorming is a technique used by business analysts to generate a wide range of ideas, explore potential solutions, and identify problems or risks. It's a collaborative process that encourages diverse perspectives and creative thinking, making it valuable for various stages of a project. Business analysts use brainstorming to gather requirements, analyze problems, explore solution options, and even to design different approaches.

Where Brainstorming is Used in Business Analysis:

Requirements Elicitation:

Brainstorming helps gather requirements from stakeholders by encouraging them to freely share their ideas and perspectives.

Problem Solving:

It's used to identify potential problems, analyze their root causes, and explore possible solutions.

Solution Design:

Brainstorming helps generate different design options for a solution, ensuring a wide range of possibilities are considered.

Risk Assessment:

Business analysts use brainstorming to identify potential risks associated with a project or solution.

Process Improvement:

Brainstorming can be used to identify areas for process improvement and develop new, more efficient workflows.

To collect suggestions for optimizing workflows

Innovation and Product Planning

To generate creative ideas for new products or services

Types of Brainstorming:

Individual: A single person generates ideas on their own.

Open: Participants call out ideas freely, and a facilitator or scribe records them.

Structured: Participants write down ideas silently, then share them in a round-robin

fashion.

Key Benefits of Brainstorming:

Encourages creativity and innovation:

Brainstorming fosters a free-flowing environment where participants feel comfortable sharing unconventional ideas.

Generates a large number of ideas:

The focus on quantity over quality in the initial phase leads to a broader range of options.

Promotes collaboration and teamwork:

Brainstorming sessions bring together diverse perspectives and encourage communication and idea sharing.

Identifies potential risks and challenges:

By exploring different scenarios, brainstorming can help uncover potential problems early on.

Improves stakeholder engagement:

Involving stakeholders in the brainstorming process increases their buy-in and commitment to the project.

By using brainstorming effectively, business analysts can unlock creative solutions, improve project outcomes, and foster a collaborative and innovative environment.

Q16. What reports the Accounts Department will generate (minimum 5 reports) – 10 Marks

Financial statement report

A financial statement report summarizes a company's financial performance and position over a specific period. It includes key components such as the balance sheet, income statement, cash flow statement, and statement of changes in equity. These sections show the company's assets, liabilities, revenues, expenses, and cash movements. Notes to the financial statements provide additional details, and if audited, an auditor's report may be included. This report helps stakeholders understand the financial health and decision-making needs of the business.

Company loan reserve report

A company loan reserve report outlines the funds set aside to cover potential losses from loans that may not be repaid. It includes details such as the total loan portfolio, the estimated amount of uncollectible loans, and the reserve balance maintained to absorb these losses. The report typically explains the basis for calculating the reserve, such as historical default rates or risk assessments. It may also show changes in the reserve over time, reasons for adjustments, and the impact on the company's financial position. This report helps ensure the company remains financially prepared for credit risks.

Credit report

A credit report is a detailed record of an individual's or a company's credit history and current credit status. It includes information such as the amount of debt owed, types of credit accounts, payment history, credit limits, and recent inquiries. For businesses, it may also list loans, trade credit from suppliers, and any public records like bankruptcies or legal judgments. Credit reports are used by lenders, suppliers, and other stakeholders to assess creditworthiness and financial reliability. A strong credit report reflects timely payments and responsible credit use, while negative marks can affect loan approvals and interest rates.

Collateral evaluation

A collateral evaluation report (often called a collateral assessment or appraisal report) provides a detailed analysis of assets pledged as security for a loan. This report outlines the type, condition, ownership, and current market value of the collateral offered by a borrower. It includes descriptions of the asset (such as property, equipment, or inventory), the valuation method used (market comparison, cost approach, or income approach), and any factors affecting its value like depreciation or market conditions. The

report helps lenders determine whether the collateral is sufficient to cover the loan in case of default, ensuring risk is properly managed.

Debt-to-income ratio report

A debt-to-income (DTI) ratio report provides an analysis of an individual's or company's ability to manage monthly debt payments in relation to their income. The report calculates the DTI ratio by dividing total monthly debt obligations by gross monthly income, usually expressed as a percentage. It includes details such as the total monthly income, total monthly debt payments (loans, credit cards, etc.), and the resulting ratio. A lower DTI indicates better financial health and a higher capacity to take on additional debt. This report is commonly used by lenders to assess credit risk and determine loan eligibility.

Q17. What is the structure of the message/mail communicated from the HR department to

the employee in case the Loan is rejected? – 5 Marks

Subject: Loan Application Status – TTS Company

Dear Mr. Andrew Parker

Thank you for submitting your loan application on July 2,2025. We appreciate your initiative and the trust you place in TTS Company.

After careful consideration, we regret to inform you that your request for a loan has not been approved at this time due to internal policy guidelines.

We understand this outcome may be disappointing. You are welcome to reapply in the future if your eligibility circumstances change or if new loan schemes become available.

Should you have any questions or need further clarification, please do not hesitate to contact Camilla Kate[HR] at 9546248790,camillak01@gmail.com.

Warm regards, Julia Kennedy Human Resources Department TTS Company

Q18. What is the structure of the message/mail communicated from the HR department to

the employee in case the Loan is approved? – 5 Marks

Subject: Loan Application Approved – TTS Company

Dear Mr.John Smith

We hope this message finds you well. Thank you for submitting your loan application dated 20.7.2025.

We are pleased to inform you that your loan has been approved. The details are as follows:

Approved Amount: ₹1,00,000

Disbursement Date: 05-07-2025

Repayment Mode: Monthly salary deductions

EMI Amount: ₹5,000

Tenure: 20 months

Interest Rate: 0% (as per internal employee welfare policy)

Please find the attached loan agreement form. Kindly sign and return a scanned copy by 03-07-2025 to initiate the disbursement.

Should you have any questions, feel free to reach out to Camilla Kate at 9546019526,camillak01@gmail.com.

Best regards,
Jullia Kennedy
Human Resources Department
TTS Company

Q19. Design a sample report on the Loans applications Received by the accounts department – 8 Marks

Loan Applications Report- July 1, 2025

Loan application ID	Applicant Name	Loan Amount	Status
PL001	John Smith	100000	Approved
EL002	Emily Willis	50000	Pending
LA003	Andrew Parker	150000	Rejected

Notes:

Approved applications have met the loan approval criteria and are eligible for loan disbursement.

Rejected applications do not meet the loan approval criteria and have been declined Pending applications are currently under review, and a decision will be communicated soon

For any inquiry or further information, please contact the account department

Q20. Which reporting Tools we will use for generating reports. – 5 Marks

The three reporting tools most commonly used by Business Analysts: Microsoft Excel, Power BI, and Tableau.

1. Microsoft Excel

What it is:

Excel is a spreadsheet application that allows users to organize, analyze, and visualize data using rows, columns, formulas, and charts. A versatile tool for data analysis,

especially with features like PivotTables, formulas, and basic charting. It's suitable for smaller datasets and when quick insights are needed.

Why Business Analysts Use It:

Excel is widely accessible and flexible. It's often used for data cleaning, quick calculations, creating pivot tables, and developing reports or dashboards.

Key Features:

Pivot Tables & Charts: For summarizing large data sets quickly.

Formulas & Functions: SUM, IF, VLOOKUP, INDEX/MATCH, etc., for analysis.

Conditional Formatting: To visually highlight trends, risks, or patterns.

Data Validation: To control inputs and maintain data quality.

Macros/VBA: For automation of repetitive tasks.

Use Cases:

Daily or weekly operational reports.

Budget tracking, financial modeling.

Requirement traceability matrix or risk register.

Limitation:

Manual effort required for dynamic or real-time reporting; lacks strong data visualization compared to BI tools.

2. Power BI (by Microsoft)

What it is:

Power BI is a Business Intelligence tool that connects to various data sources to create interactive dashboards and visual reports. A comprehensive business intelligence tool that allows for creating interactive dashboards and reports, integrating with various data sources, and sharing insights across teams. It's a strong choice for businesses heavily invested in the Microsoft ecosystem

Why Business Analysts Use It:

It allows non-technical users to build powerful visual reports using drag-and-drop functionality and integrates seamlessly with Excel and databases.

Key Features:

Data Connections: Connects to Excel, SQL Server, SharePoint, APIs, and cloud services.

Data Modeling: Use of DAX (Data Analysis Expressions) to create measures and KPIs.

Real-Time Dashboards: Refresh data automatically from sources.

Interactive Visuals: Filters, slicers, and drill-down options.

Power BI Service: Publish and share reports across the organization securely.

Use Cases:

Department performance dashboards.

Sales trends, inventory tracking.

Visualizing customer feedback or behavior analytics.

Limitation:

Requires some learning for advanced modeling; performance issues with very large datasets on desktop version.

3. Tableau

What it is:

Tableau is a powerful data visualization tool used to convert raw data into understandable dashboards and visual analytics. Known for its powerful data visualization capabilities, enabling users to create compelling and interactive reports and dashboards. It's often favored for its flexibility and ability to handle large datasets.

Why Business Analysts Use It:

Tableau excels in data visualization. Its drag-and-drop interface makes it ideal for exploring trends, patterns, and outliers in large datasets.

Key Features:

Connects to multiple data sources: Excel, SQL, Google Sheets, web data connectors.

Visual Analytics: Instant chart suggestions, drill-down, filters.

Calculated Fields: Perform custom calculations on the flv.

Dashboard Creation: Combine multiple visualizations into interactive dashboards.

Storytelling: Combine visuals with text/narrative to present findings.

Use Cases:

Market research analysis.

Customer behavior dashboards.

Executive-level KPI dashboards.

Limitation:

More expensive than Power BI for enterprise use; has a steeper learning curve for beginners.

Factors to consider when choosing:

Complexity of data analysis needs:

If basic analysis is sufficient, Excel might be enough. For advanced analytics and visualization, Power BI or Tableau are more appropriate.

Data source integration:

Power BI is often preferred for its seamless integration with other Microsoft products, while Tableau can connect to a wider range of data sources.

Team expertise and budget:

Power BI is generally considered more affordable and beginner-friendly, while Tableau offers more advanced features at a potentially higher cost.