**Q1. What is the difference between Brainstorming and JAD Sessions? 3 Marks**

Brainstorming and Joint Application Design (JAD) are two distinct techniques used in problem-solving and software development processes. Below are the differences between them.

| **Subject** | **Brainstorming** | **JAD (Joint Application Design)** |
| --- | --- | --- |
| Definition | Brainstorming is a creative technique where a group of people gather to generate a large number of ideas or solutions to a specific problem or question. It encourages open discussion, free thinking, and innovative ideas without judgment or criticism. | JAD is a structured workshop-based approach used to gather comprehensive software requirements and achieve consensus among stakeholders. It involves specific participants working together to define system functionalities, make design decisions, and document requirements and specifications. |
| Purpose | Generate a large number of ideas or solutions to a problem. | Elicit comprehensive software requirements and achieve consensus among stakeholders. |
| Participants | Involves a group of individuals from different backgrounds or roles. | Includes specific participants such as business analysts, subject matter experts, project managers, users, and technical teams. |
| Structure | Informal and unstructured with no strict rules or guidelines. | Structured and facilitated with predefined agendas and specific activities. |
| Focus | Emphasizes generating a large quantity of ideas, with a focus on divergent thinking. | Focuses on eliciting detailed requirements, achieving consensus, and converging on a shared understanding. |
| Idea Handling | Values all ideas, regardless of their wild or unconventional nature. | Aims to document and formalize requirements, designs, and specifications for software development. |
| Facilitation | Typically does not require a facilitator, but can benefit from a moderator. | Usually facilitated by a JAD facilitator or a business analyst to ensure productive outcomes. |
| Documentation | Often does not produce formal documentation, but ideas can be captured for future reference. | Produce detailed requirement documents, system designs, and functional specifications. |
| Thinking Approach | Encourages free thinking, open discussion, and exploration of different possibilities. | Promote convergent thinking, aligning stakeholders' understanding and achieving consensus. |
| Iterative Process | Can be a one-time session or repeated as needed for further idea generation. | Often conducted iteratively throughout the software development lifecycle, allowing for continuous refinement and validation of requirements. |
| Outcome | Focuses on generating innovative ideas and concepts. | Aims to gather accurate requirements, achieve consensus, and provide a foundation for system development. |
| Use Case | Early-stage ideation, problem exploration. | Requirements gathering, system specification, project scoping. |

**Q 2. Why is Document Analysis one of the compulsory techniques we use in a Project? Justify – 3 Marks**

Document analysis is a crucial technique used in project management for several reasons. Here are the points justifying why document analysis is considered a compulsory technique:

1. **Understanding Existing Documents:** Document analysis allows project teams to thoroughly examine and understand existing documents related to the project. These documents can include project charters, requirements specifications, design documents, contracts, and other relevant materials. By analyzing these documents, project stakeholders gain valuable insights into the project's objectives, scope, constraints, and requirements.
2. **Establishing Baseline:** Document analysis helps establish a baseline for the project. It allows project managers to identify the current state of the project, including its documentation, processes, and deliverables. By analyzing existing documents, project teams can determine the starting point and use it as a reference throughout the project lifecycle. This baseline serves as a foundation for evaluating progress, managing changes, and ensuring adherence to project objectives.
3. **Reference for Decision-Making:** Document analysis provides a reference point for decision-making throughout the project. By reviewing existing documents, project teams can identify relevant information, lessons learned, and best practices from previous projects or organizational standards. This knowledge serves as a guide when making critical decisions related to project planning, resource allocation, risk management, and problem-solving.
4. **Identifying Gaps and Inconsistencies:** Document analysis helps uncover gaps, inconsistencies, or ambiguities within project documentation. By carefully reviewing documents, project stakeholders can identify missing requirements, conflicting information, or areas that require further clarification. This analysis enables project teams to address these issues proactively, reducing the potential for misunderstandings or errors during project execution.
5. **Compliance and Regulatory Requirements:** Document analysis is essential for ensuring compliance with legal, regulatory, and industry standards. By thoroughly examining relevant documents, project teams can identify specific requirements and guidelines that must be followed. This analysis helps in aligning the project with legal and regulatory obligations, mitigating risks, and maintaining adherence to industry best practices.

Overall, document analysis is a compulsory technique in project management because it provides valuable insights, establishes a baseline, serves as a reference for decision-making, helps identify gaps and inconsistencies, and ensures compliance with relevant requirements. It is a critical step in understanding the project context, setting the right direction, and facilitating effective project execution.

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

Reverse engineering is used in various contexts to extract knowledge and information from existing systems or products.

Here's how reverse engineering can be applied in the following contexts:

**Software Development and Maintenance:**

* **Understanding Legacy Systems:** Reverse engineering helps gain insights into legacy systems that lack proper documentation or have outdated technology. By analyzing the code and structure of these systems, developers can understand their functionality, dependencies, and business logic. This understanding facilitates modernization, migration, enhancements, or issue resolution.
* **Interoperability and Integration:** Reverse engineering is used to analyze the interfaces and protocols of external systems or APIs. By reverse engineering, developers can understand the data formats, communication protocols, and integration points required for interoperability. This enables the development of compatible software that seamlessly integrates and communicates with these systems.

**Product Analysis and Competitor Research:**

* **Competitor Analysis:** Reverse engineering allows businesses to analyze and understand the functionality, features, and design of competing products. By examining competitors' products, including their user interfaces and underlying technology, organizations can gain insights into their strengths and weaknesses. This analysis aids in identifying market trends, benchmarking against competitors, and making informed decisions for product improvement or differentiation.
* **Intellectual Property Protection:** Reverse engineering can be utilized to protect intellectual property rights. By reverse engineering competitors' products, organizations can detect any infringements on their own patented technologies or copyrights. This analysis helps in identifying potential violations and enables legal actions to safeguard intellectual property.
* **Decomposing Systems for Integration or Migration**:

Reverse engineering is used to understand how different parts of a system communicate and interact, which is particularly useful when integrating legacy systems with new software solutions or when migrating data and functionality from one system to another. Business analysts use reverse engineering to document these interactions, identify necessary data transformation rules, and ensure that integrations happen smoothly.

* **Enhancing Product Understanding:** Reverse engineering helps in gaining a deeper understanding of complex or undocumented products. By reverse engineering products, organizations can uncover their internal workings, underlying algorithms, and design principles. This knowledge is valuable for improving product quality, identifying optimization opportunities, and enhancing product compatibility.
* **Repairing or Rebuilding Obsolete Parts:** In certain industries such as manufacturing or aerospace, reverse engineering is used to recreate or repair obsolete parts. By reverse engineering the original part, organizations can recreate it or manufacture a suitable replacement, ensuring the continued operation of systems or equipment.

In conclusion, reverse engineering serves as a valuable technique in software development and maintenance for understanding legacy systems, achieving interoperability, and enhancing product understanding. It is also employed in product analysis and competitor research, including competitor analysis and intellectual property protection. By leveraging reverse engineering techniques, organizations can gather valuable information, make informed decisions, and drive innovation in their respective domains.

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

| **Subject** | **Brainstorming** | **Focus Group** |
| --- | --- | --- |
| Definition | Brainstorming is a technique where a group of people come together to generate a large number of ideas or solutions to a specific problem or question. It encourages open discussion, free thinking, and innovative ideas without judgment or criticism. | Focus groups are gatherings of a targeted group of individuals who share their opinions, perceptions, and experiences regarding a particular topic or product. It involves guided discussions and qualitative insights to gain a deeper understanding of the participants' perspectives. |
| Purpose | Generate a large number of ideas or solutions to a problem. | Gather qualitative insights and feedback on a specific topic or product. |
| Participants | Involves a group of individuals from different backgrounds or roles. | Include a targeted group of participants who fit specific demographic or user criteria. |
| Idea Generation vs. Insight Gathering | Focuses on generating a wide range of ideas without judgment or criticism. | Facilitate guided discussions and gather qualitative insights and feedback from participants. |
| Setting | Typically relaxed and informal, allowing participants to freely express ideas. | Follow a structured format, often in a controlled environment, guided by a facilitator. |
| Quantity vs. Quality | Emphasizes generating a large quantity of ideas, with quality evaluation postponed. | Aim to gain in-depth qualitative insights, focusing on the quality of opinions and feedback. |
| Thinking Approach | Encourages divergent thinking, exploration of possibilities, and open discussion. | Gather opinions, perceptions, and experiences, providing deeper insights on the topic of interest. |
| Facilitation | May or may not have a facilitator, but a moderator can help ensure all ideas are heard. | Moderated by a facilitator who guides the discussion and ensures relevant insights are obtained. |
| Decision-making | Primarily focuses on generating a pool of ideas for consideration. | Insights gathered inform decision-making, such as product improvements or marketing strategies. |
| Structure | Relatively unstructured, with ideas freely shared without a specific agenda. | Follow a structured format, driven by a set of pre-determined questions or discussion points. |
| Sampling | No specific sampling process as participants can come from various backgrounds. | Involves a sampling process to select participants who represent the target audience or demographics. |
| Use Case | Early-stage ideation, problem exploration. | Market research, user testing, understanding customer perceptions, and gathering feedback for product improvement |

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

**Observation technique** is a research method where researchers systematically observe and record behaviours, actions, or phenomena to gain insights and understanding.

There are two main approaches to observation: active and passive.

**Active Observation:**

* Purpose: In active observation, researchers intentionally engage with the subjects being observed, participating in their activities or conversations.
* Interaction: The observer interacts directly with the subjects, asking questions, probing further, or seeking clarification to gain a deeper understanding.
* Note-taking: Observers take detailed notes during or immediately after the observation to capture specific behaviours, actions, and relevant details.
* Flexibility: Active observation allows for flexibility and adaptability, as the observer can shift focus based on emerging patterns or unexpected findings.
* Probing and Interviewing: Researchers may conduct interviews or engage in discussions with the subjects to gain additional insights or validate their observations.

**Eg:** A teacher actively observing a classroom, a researcher participating in a focus group discussion, or an ethnographer engaging with a community.

**Passive Observation:**

* Purpose: In passive observation, researchers observe subjects without actively participating or interacting with them.
* Non-intrusiveness: The observer maintains a non-intrusive presence, ensuring that their presence does not influence or disrupt the natural behaviours or events being observed.
* Recording: Researchers often use recording devices like video cameras or audio recorders to capture the observations for later analysis.
* Minimal Interference: The goal is to minimize any potential bias or influence from the observer, allowing for more natural and authentic behaviours to emerge.
* Analysis later: After the observation, researchers analyse the recorded data, reviewing the observations in detail and extracting relevant information.

**Eg:** Video recording of customer behaviour in a store, tracking user interactions on a website, or observing wildlife in their natural habitat.

Both active and passive observation approaches have their strengths and uses. Active observation enables deeper engagement, direct interaction, and real-time understanding, while passive observation allows for unobtrusive data collection and a focus on natural behaviours. The choice between active and passive observation depends on the research objectives, context, and the level of involvement required to gather meaningful data.

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

As a Business Analyst (BA), I would conduct the Requirements Workshop by following these steps:

1. **Plan and Prepare:**
   * Clearly define the objectives and scope of the workshop based on the project requirements.
   * Identify the stakeholders who need to be involved in the workshop.
   * Determine the workshop duration, considering the complexity of the project and the number of topics to be covered.
   * Gather any relevant pre-workshop materials, such as existing documentation or user feedback, to provide context to the participants.
2. **Identify Participants:**
   * Identify key stakeholders and subject matter experts who possess valuable insights and knowledge related to the project.
   * Include representatives from different roles and departments to ensure a holistic understanding of the requirements.
   * Send invitations to the identified participants, clearly stating the purpose, agenda, and expected outcomes of the workshop.
3. **Create an Agenda:**
   * Develop a detailed agenda that outlines the topics to be covered, activities, and time allocated for each item.
   * Sequence the agenda items logically, ensuring a smooth flow and addressing the most critical requirements first.
   * Include interactive exercises, brainstorming sessions, and discussions to encourage active participation and collaboration.
   * Allocate time for breaks to allow participants to refresh and recharge during longer workshops.
4. **Establish Workshop Environment:**
   * Set up a conducive workshop environment that encourages open communication and collaboration.
   * Arrange the seating in a way that promotes interaction and engagement among participants.
   * Ensure necessary equipment, such as projectors, whiteboards, or sticky notes, are available for visual aids and interactive exercises.
   * Display the agenda and workshop objectives prominently to keep everyone focused and aligned.
5. **Facilitate the Workshop:**
   * Start the workshop by clearly communicating the objectives, agenda, and expected outcomes to participants.
   * Facilitate discussions by actively listening, asking probing questions, and encouraging participants to express their ideas and perspectives.
   * Use visual aids, diagrams, or prototypes to illustrate concepts and promote better understanding.
   * Capture key information, decisions, and requirements discussed during the workshop in real-time using note-taking techniques or collaboration tools.
6. **Validate and Prioritize Requirements:**
   * Engage participants in reviewing and validating the requirements captured during the workshop.
   * Seek consensus on the understanding and interpretation of requirements to ensure alignment among stakeholders.
   * Prioritize the requirements based on their importance, impact, and feasibility to guide further project planning and development.
7. **Document and Share Workshop Outputs:**
   * Consolidate the workshop outputs, including documented requirements, decisions made, and any identified risks or constraints.
   * Review the documented outputs for accuracy and clarity, making necessary refinements or additions if required.
   * Share the workshop outputs with stakeholders, including participants who attended the workshop, for review and feedback.
   * Incorporate the validated requirements into the project documentation and communicate any changes or updates to the relevant project team members.

By following this approach, I would ensure a well-structured and collaborative requirements workshop that gathers accurate requirements, fosters stakeholder engagement, and establishes a solid foundation for successful project execution.

**Q7. In which context, Interview Technique can be conducted by a BA ? How many approaches are there in conducting Interviews? (Structured – Unstructured) Explain them. Explain the difference between Open Ended Questions and Closed ended Questions – 6 Marks**

As a Business Analyst (BA), the interview technique can be conducted in various contexts to gather information and insights from stakeholders, subject matter experts, users, or other relevant individuals. Here are a few common contexts where interviews can be conducted by a BA:

1. Requirements Elicitation: Interviews are conducted with stakeholders and users to gather their requirements, needs, and expectations for a project or system. These interviews help in understanding their perspectives, business processes, pain points, and desired outcomes.
2. User Research: Interviews with end-users or customers are conducted to gain insights into their behaviours, preferences, and challenges. User research interviews help in understanding user needs, identifying usability issues, and improving the user experience.
3. Stakeholder Analysis: Interviews are conducted with key stakeholders to identify their roles, responsibilities, interests, and influence in the project. These interviews help in understanding stakeholder expectations, managing their requirements, and ensuring stakeholder alignment.
4. Process Analysis: Interviews with process owners or subject matter experts are conducted to analyse existing business processes, identify bottlenecks, and gather information for process improvement initiatives.
5. Issue Investigation: Interviews can be conducted when investigating issues or incidents within a project or system. Interviews help in understanding the root causes, gathering details, and exploring potential solutions.

There are two main approaches to conducting interviews:

1. **Structured Interviews:**

* Purpose: Structured interviews follow a predefined set of questions or a script. The questions are standardized and asked in the same order for consistency.
* Approach: The interviewer asks the questions as planned, allowing minimal deviation from the script. The focus is on gathering specific information and maintaining consistency across interviews.
* Advantages: Structured interviews ensure uniformity, facilitate data comparison, and allow for quantitative analysis of responses.
* Limitations: They may limit flexibility and may not capture nuanced or unexpected insights. Participants may feel constrained by the predetermined questions.

1. **Unstructured Interviews:**

* Purpose: Unstructured interviews are more open-ended and conversational. The questions are not pre-determined, allowing for flexibility and exploration of various topics.
* Approach: The interviewer engages in a free-flowing conversation, adapting questions based on participant responses. This approach allows for in-depth exploration and uncovering unexpected insights.
* Advantages: Unstructured interviews encourage participants to express themselves freely, leading to richer qualitative data and the discovery of valuable insights.
* Limitations: Unstructured interviews can be time-consuming and may result in less standardized data. Analysis and comparison of responses may be more challenging.

It's important to note that interviews can also utilize a hybrid approach, incorporating elements of both structured and unstructured techniques based on the interview's goals and context. The chosen approach should be aligned with the specific objectives, participant characteristics, and available resources for an effective interview process.

**Open-ended Questions Vs Close-ended Questions:**

| **S.No** | **Open Ended Questions** | **Close Ended Questions** |
| --- | --- | --- |
| 1 | Open-ended questions are designed to elicit detailed and descriptive responses from the interviewee. | Closed-ended questions are designed to elicit specific and concise responses from the interviewee. |
| 2 | These questions allow the interviewee to provide their own thoughts, opinions, and explanations. | These questions usually have predetermined answer options or require a simple "yes" or "no" response. |
| 3 | Elicit rich qualitative data. | Elicit specific information or opinions. |
| 4 | Provide in-depth insights and understanding. | Provide concise and easily quantifiable data. |
| 5 | Offer flexibility in responses, allowing interviewees to provide unique and diverse answers. | Offer less flexibility in responses due to limited answer options. |
| 6 | Enable exploration of different aspects of a topic or issue. | Guide interviewees toward specific choices or responses. |
| 7 | Provide qualitative data that requires thorough analysis. | Provide quantitative or easily categorized data. |
| 8 | May involve coding or categorization of responses. | Allow for straightforward analysis and statistical interpretation. |
| 9 | Enable identification of patterns, themes, and emerging insights. | Facilitate comparison and summarization of responses. |
| 10 | **Examples:** "What are your thoughts on the new product design?" or "How would you improve the customer experience?" | **Examples:** "Did you attend the training session?" or "On a scale of 1 to 5, how satisfied are you with the service?" |

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

The questionnaire technique is a research method that involves using a structured set of written questions to collect data and information from individuals or groups. It is a widely used approach to gather data in a standardized and systematic manner. Questionnaires can be administered in various formats, such as paper-based forms, online surveys, or electronic surveys.

The questionnaire technique can be used in various contexts, including:

1. **Surveys:** Questionnaires are commonly used in surveys to collect data from a large sample of respondents. Surveys can cover a wide range of topics, such as customer satisfaction, market research, employee feedback, or social research.
2. **Research Studies:** Questionnaires are used in research studies to gather data related to specific research objectives. They help researchers collect quantitative or qualitative data, depending on the research design and questions.
3. **Needs Assessment:** Questionnaires are used to assess the needs and requirements of individuals or organizations. For example, in the education sector, questionnaires can be used to assess the training needs of teachers or the learning needs of students.
4. **Evaluations:** Questionnaires are employed to evaluate programs, services, or events. They gather feedback and opinions from participants to assess the effectiveness, satisfaction, or impact of the subject being evaluated.

**Example:**

A company is conducting market research to understand consumer preferences and purchasing behaviour related to a new product they plan to launch.

* The company designs a questionnaire that includes questions about demographic information (age, gender, income), product preferences, brand awareness, and purchase intent.
* They distribute the questionnaire to a representative sample of the target market, which may include both existing and potential customers.
* The questionnaire can be distributed through various channels, such as online surveys, mail-in forms, or in-person interviews.
* Respondents are asked to provide their feedback and opinions by answering the questions in the questionnaire.
* Once the responses are collected, the company analyses the data to gain insights into consumer preferences, identify target market segments, evaluate the potential demand for the new product, and make informed decisions regarding product development, marketing strategies, and pricing.

In this example, the questionnaire technique is utilized in market research to gather data from consumers, allowing the company to understand their preferences, behaviour, and opinions. The findings from the questionnaire help the company make informed decisions and tailor their product and marketing strategies to meet the needs and desires of their target market.

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

Sorting the requirements is a process of organizing and prioritizing them based on various criteria such as importance, feasibility, urgency, or alignment with business goals. It helps in identifying the most critical and valuable requirements for further analysis, design, and implementation.

**Example:**

A software development project is underway to create a new e-commerce platform for a retail company. The project has gathered a large number of requirements from various stakeholders, including users, management, and technical teams. The requirements need to be sorted to determine their priority and ensure efficient allocation of resources.

1. **Importance:** The requirements are sorted based on their business impact and value. High-priority requirements that directly contribute to the core functionality and goals of the e-commerce platform are identified. For example, secure payment processing, product search and filtering, and user account management could be classified as high-priority requirements.
2. **Feasibility:** The requirements are assessed for their technical feasibility and complexity. This involves analysing the resources, skills, and technologies required to implement each requirement. Complex or resource-intensive requirements may be given special consideration or broken down into smaller, manageable components.
3. **Urgency:** Some requirements may have specific time constraints or dependencies. They are sorted based on their urgency and the project timeline. For instance, legal and compliance requirements, seasonal promotions, or upcoming marketing campaigns may be given higher priority due to their time-sensitive nature.
4. **Stakeholder Alignment:** The requirements are evaluated for their alignment with the needs and expectations of different stakeholders. Requirements that satisfy a majority of stakeholders or align closely with the company's strategic objectives may be given higher priority.

By sorting the requirements in the example project, the development team can effectively prioritize their efforts and resources. They can focus on implementing the high-priority requirements that provide the most value and meet critical business needs. This sorting process helps ensure that the project delivers the essential features and functionality in a timely and efficient manner.

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

Prioritizing requirements is a crucial step in the requirements management process. It involves determining the relative importance and urgency of each requirement to guide decision-making, resource allocation, and project planning.

### **Use of Requirement Prioritization:**

1. **Project Planning**: To ensure that the most important requirements are addressed early and that lower-priority features are scheduled for later or removed if necessary.
2. **Agile Development**: In Agile methodologies (e.g., Scrum), requirements (user stories) are continuously prioritized in the **Product Backlog** to focus on delivering the highest value in each sprint.
3. **Stakeholder Alignment**: Helps align stakeholder expectations, especially when there are competing demands and limited resources.
4. **Resource Management**: Ensures the project focuses resources on the most valuable requirements first, minimizing wasted effort.

### **Example:**

A Business Analyst is working on a **Customer Relationship Management (CRM)** system for a retail business. The stakeholders have provided a long list of features, such as:

* Contact Management
* Lead Tracking
* Customer Segmentation
* Reporting & Analytics
* Mobile App Access
* Integration with Marketing Tools

**Prioritization**:

Using the **MoSCoW** method (Must-have, Should-have, Could-have, Won’t-have), the BA categorizes the requirements:

* **Must-have**: Contact Management, Lead Tracking (Critical for sales operations)
* **Should-have**: Reporting & Analytics, Integration with Marketing Tools (High impact on decision-making)
* **Could-have**: Mobile App Access (Beneficial, but not essential for initial rollout)
* **Won’t-have**: Customer Segmentation (Will be included in a future release)

### **Outcome:**

The team focuses first on implementing the **Must-have** features to ensure the CRM supports basic business functions. The **Should-have** features will follow once the essential functionalities are in place, ensuring the system adds value early and stakeholders are satisfied.

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

To drive weekly status reporting effectively, the following steps can be taken:

1. **Define Reporting Requirements:**
   * Clearly define the information and metrics that need to be included in the weekly status reports.
   * Specify the key deliverables, milestones, risks, and issues that should be covered.
   * Determine the level of detail required to provide meaningful insights into project progress.
2. **Set Reporting Frequency and Deadline:**
   * Determine the weekly reporting frequency that aligns with project needs and stakeholder expectations.
   * Set a consistent deadline for submitting the reports to ensure timely updates.
   * Communicate the reporting frequency and deadline to all team members and stakeholders involved.
3. **Standardize Reporting Format:**
   * Establish a standardized reporting format to ensure consistency and ease of understanding.
   * Define the structure and sections of the report, such as achievements, challenges, upcoming tasks, and resource requirements.
   * Provide templates or guidelines to facilitate the reporting process and maintain a uniform format.
4. **Communicate Expectations:**
   * Clearly communicate the purpose and importance of weekly status reporting to the team.
   * Explain how the reports contribute to project visibility, decision-making, and timely issue identification.
   * Emphasize the significance of accurate and transparent reporting for effective project management.
5. **Provide Guidance and Support:**
   * Offer guidance and training on how to prepare and submit the weekly status reports.
   * Provide examples or sample reports to help team members understand the desired content and level of detail.
   * Offer assistance and clarification to address any questions or concerns regarding the reporting process.
6. **Remind and Follow Up:**
   * Send regular reminders to team members regarding the upcoming reporting deadline.
   * Follow up with individuals who have not submitted their reports, ensuring compliance with the reporting requirements.
   * Address any challenges or obstacles faced by team members in submitting their reports promptly.
7. **Review and Consolidate Reports:**
   * Review each submitted report for completeness, accuracy, and adherence to the reporting format.
   * Consolidate the individual reports into a comprehensive summary or dashboard that provides an overall project status view.
   * Identify common themes, trends, or issues across reports to gain insights into the project's progress and potential areas of improvement.
8. **Share and Discuss the Reports:**
   * Share the consolidated status report with relevant stakeholders, such as project sponsors, clients, or management.
   * Facilitate discussions or meetings to review the report findings, address concerns, and make decisions based on the reported information.
   * Encourage open dialogue and collaboration to promote a shared understanding of the project status and foster effective decision-making.
9. **Act on the Findings:**
   * Take necessary actions based on the findings and recommendations presented in the status reports.
   * Address identified risks, issues, or challenges promptly.
   * Allocate resources or adjust project plans as needed to ensure project success.
10. **Continuously Improve the Reporting Process:**
    * Seek feedback from team members and stakeholders to identify opportunities for improving the reporting process.
    * Regularly assess the relevance and effectiveness of the reporting requirements, format, and frequency.
    * Adapt the reporting process based on lessons learned and evolving project needs.

By following these steps, weekly status reporting can be effectively managed, providing visibility into project progress, highlighting key issues, and enabling timely decision-making and action.

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

| **Weekly Project Update Meeting Minutes** | |
| --- | --- |
| **Date** | 18th Dec 2024 |
| **Time** | 10am to 12pm |
| **Location** | Crest Meeting Hall, Chennai. |
| **Attendees** | • Mr.Vandanam, Project Manager • Ms.Juhi, Senior Java Developers • Mr.Teyson, Developer • Ms.Sathya, Designer • Mr.Raguvaran, QA Analyst • Mr.Karthikeyan S, Business Analyst |
| **Agenda** | 1. Review of Previous Action Items 2. Project Status Update 3. Discussion on Key Challenges 4. Next Steps and Action Items |
| **Discussion Summary** | **Review of Previous Action Items:** • Action Item 1: Ms.Juhi to finalize the UI wireframes. Completed. • Action Item 2: Mr.Teyson to investigate the integration issue. In progress, awaiting response from the external API team. • Action Item 3: Ms.Sathya to conduct usability testing. Completed, and findings will be shared during the meeting. |
| **Project Status Update:** • Mr.Teyson provided an update on the development progress. The front-end development is on track, and they are working on integrating the payment gateway module. • Ms.Sathya shared the design updates and mentioned that the final designs will be ready for review by the end of the week. • Mr.Raguvaran reported on the QA activities, mentioning that they have completed functional testing of the core features and will proceed with regression testing next. |
| **Discussion on Key Challenges:** • The team discussed the issue related to the external API integration and agreed to escalate the matter to the API team's manager for a quicker resolution. • The team also addressed the challenge of resource availability for upcoming sprints and decided to assess workload distribution to ensure balanced efforts. |
| **Next Steps and Action Items** | **Action Item 1:** Mr.Teyson to follow up with the API team regarding the integration issue and provide an update in the next meeting. **Action Item 2:** Ms.Sathya to share the finalized designs with the team by [Date]. **Action Item 3:** Mr.Raguvaran to proceed with regression testing and update the test cases accordingly.  **Action Item 4:** Ms.Juhi to review the resource allocation and propose a revised plan to balance the workload. |
| **Meeting Conclusion** | The team agreed to meet again next week at the same time to review progress, address challenges, and discuss any additional updates. |
| **Meeting Adjourned** | 12pm |
| **Next Meeting** | |
| **Date** | 30th Dec 2024 |
| **Time** | 10am to 12pm |
| **Location** | Crest Meeting Hall, Chennai. |
| **Agenda** | 1. Review of Previous Action Items 2. Project Status Update 3. Discussion on Key Challenges 4. Next Steps and Action Items |
| **Prepared By & Date** | Karthikeyan S, Business Analyst on 18th Dec 2024 |

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

A Change Tracker Document is a formal document used to track and manage changes within a project or organization. It serves as a record of requested changes, their impact analysis, risk assessment, feasibility analysis, and implementation details. The Change Tracker Document captures key information related to a change, including its description, assessment of its impact, analysis of associated risks, estimation of effort required, and approval status.

The below is the sample Change Tracker Document based on online agriculture store project:

| **CHANGE TRACKER DOCUMENT** | |
| --- | --- |
| Version | 1.0 |
| Date | Dec 12, 2024 |
| **Change Details** | |
| Change Request Number | CR001 |
| Requested By | Ben and Kevin |
| Date Requested | Dec 10, 2024 |
| Change Description | Enable farmers to add and sell their crop yields through the application. Introduce an auction system for crop yields. |
| **Change Assessment** | |
| Impact Analysis | Allowing farmers to sell their crop yields will provide them with additional income opportunities. The auction system will create a competitive marketplace for buyers and potentially increase the farmers' earnings. |
| Risk Analysis | Potential risks include technical challenges in implementing the crop yield listing and auction system, ensuring secure transactions, and managing the logistics of product delivery. |
| Feasibility Analysis | The addition of crop yield listings and the auction system is feasible within the existing framework of the online agriculture product store. |
| Effort Estimate | Effort estimate to be determined after detailed analysis. |
| Approval Status | Pending |
| Approval Date | N/A |
| **Implementation Details** | |
| Developer / Implementer | APT IT Solution |
| Start Date | To be determined |
| End Date | To be determined |
| Test Coverae | To be determined |
| Test Results | To be determined |
| Deployment Plan | The deployment plan will include integrating the crop yield listing and auction system into the existing online store. It will involve updating the user interface and implementing secure payment and delivery options. |
| **Rollback Plan** | |
| Rollback Procedure | In case of any critical issues, the previous version of the online store will be restored, and the crop yield listing and auction system will be disabled. |
| Rollback Test Plan | A rollback test plan will be executed to ensure the successful restoration of the previous version. |
| Rollback Date | N/A |
| Rollback Results | N/A |
| **Documentation Updates** | |
| Document Affected | Project Requirements Document |
| Update Description | Added details regarding the crop yield listing and auction system requirements. |
| Update Date | Dec 12, 2024 |
| Updated By | Mr. Henry |
| **Approvals** | |
| Approval 1 | Mr. Henry |
| Approval 2 | Mr. Pandu |
| Approval Date | Dec 12, 2024 |
| **References** | |
| Related Documents | Project Requirements Document, Project Plan |
| Supporting Materials | N/A |

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

| **Comparison Factor** | **Waterfall** | **Agile Scrum** |
| --- | --- | --- |
| Approach | Sequential and linear approach where each phase is completed before moving to the next. | Iterative and incremental approach with short development cycles called sprints. |
| Flexibility | Less flexible as changes are difficult to incorporate once a phase is completed. | More flexible as changes can be accommodated throughout the project. |
| Planning | Detailed planning upfront with a focus on predicting and estimating all project aspects. | Planning at the start of each sprint based on priorities and team capacity. |
| Communication | Emphasizes formal documentation and relies on structured communication channels. | Emphasizes frequent and direct communication through daily meetings and collaboration. |
| Iterative Development | No iterative development. Each phase is completed once, and subsequent phases build upon the outputs of previous phases. | Iterative development with the ability to produce working increments in each sprint. |
| Feedback and Adaptation | Feedback and review occur at the end or major milestones, making it challenging to incorporate changes. | Continuous feedback and adaptation throughout the project. |
| Roles and Responsibilities | Defined roles for each phase with specialized teams or individuals assigned to specific tasks. | Collaborative and self-organizing teams with defined roles like Scrum Master, Product Owner, and Development Team. |
| Documentation | Extensive documentation at each phase, focusing on requirements, design, and testing. | Lean documentation with a focus on delivering working software. |
| Risk Management | Risks are identified and managed upfront during the planning phase. | Continuous risk management throughout the project. |
| Project Completion | Marked by the final delivery of the product after all phases are completed. | Marked by the achievement of product increments or project goals. |
| Feasibility Evaluation | Thorough feasibility evaluation upfront to assess technical, economic, operational, and schedule feasibility. | Ongoing feasibility evaluation throughout the project to adjust scope and direction. |
| Project Planning | Comprehensive and detailed project plan developed during the planning phase. | Iterative planning at the start of each sprint based on priorities and team capacity. |
| Project Progress | Measured by the completion of predefined phases and milestones. | Measured by the completion of sprint deliverables and achievement of sprint goals. |
| Team Roles | Predefined and specialized roles assigned based on expertise for each phase. | Cross-functional team roles with overlapping skill sets to promote collaboration and flexibility. |

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

The brainstorming technique is a structured approach to generating ideas and solutions through group collaboration and open discussion. It provides a supportive environment that encourages participants to think creatively, explore various perspectives, and generate a large quantity of ideas. The primary goal of brainstorming is to foster innovation, problem-solving, and decision-making by tapping into the collective wisdom and creativity of the group.

1. **Idea Generation:** Brainstorming is most commonly used for generating a large number of ideas quickly. It provides a platform for individuals to freely express their thoughts, encouraging creative thinking and allowing for the exploration of multiple possibilities.
2. **Project Planning:** Brainstorming can be utilized during project planning to identify potential risks, challenges, and opportunities. It helps teams to identify project goals, define key tasks, allocate resources, and create an action plan. By involving team members in the brainstorming process, it enhances their ownership and commitment to the project.
3. **Problem Solving:** Brainstorming is an effective method for problem-solving. By bringing together diverse perspectives and experiences, it allows for the exploration of different solutions and approaches to overcome challenges. It encourages participants to think outside the box and consider unconventional ideas, leading to innovative and effective problem-solving outcomes.
4. **Team Building:** Brainstorming promotes collaboration and teamwork. It creates a safe and inclusive environment where individuals can share their ideas without fear of judgment. By encouraging active participation and valuing all contributions, it fosters a sense of unity and cooperation among team members.
5. **Innovation and Product Development:** Brainstorming is a valuable tool in fostering innovation and driving product development. It encourages the generation of novel ideas and concepts, enabling organizations to stay competitive and meet evolving customer needs. By involving diverse stakeholders, including engineers, designers, marketers, and customers, it ensures a comprehensive exploration of ideas and a holistic approach to innovation.
6. **Strategic Planning:** Brainstorming is essential for strategic planning processes. It allows organizations to explore different strategic directions, assess potential risks and opportunities, and develop actionable plans. By involving key decision-makers and subject matter experts, it facilitates a comprehensive analysis of the internal and external factors that impact the organization's future.
7. **Decision Making**: Brainstorming can be used as a tool for decision making. By generating a wide range of ideas and considering multiple perspectives, it helps teams make informed decisions. The brainstorming process allows for the evaluation and selection of the most viable options based on their merits and alignment with the desired outcomes.
8. **Process Improvement:** Brainstorming can be applied to identify opportunities for process improvement within an organization. By encouraging participants to think critically about existing processes, it helps uncover inefficiencies, bottlenecks, and areas for optimization. Brainstorming sessions can lead to innovative solutions and streamlined workflows that enhance productivity and overall performance.
9. **Training and Development:** Brainstorming can be utilized in training and development programs. It provides a platform for individuals to share their knowledge, insights, and experiences, fostering a learning environment. By engaging participants in brainstorming sessions, organizations can tap into the collective expertise of their employees and facilitate continuous learning and professional growth.
10. **Marketing and Advertising:** Brainstorming is commonly used in marketing and advertising to generate creative ideas for campaigns, promotions, and branding strategies. It allows marketing teams to explore different messaging approaches, target audiences, and channels for reaching customers. Brainstorming sessions in this context can result in innovative marketing campaigns that capture attention and effectively communicate the desired messages.
11. **Problem Identification:** Brainstorming can be valuable for problem identification. By encouraging open discussion and the exploration of various perspectives, it helps teams identify underlying issues and challenges that may not be immediately apparent. Brainstorming sessions focused on problem identification enable organizations to address root causes and develop targeted solutions.
12. **Conflict Resolution:** Brainstorming can also be utilized for conflict resolution. By providing a platform for open dialogue, it allows conflicting parties to express their perspectives and concerns. Brainstorming sessions aimed at conflict resolution can facilitate understanding, promote empathy, and generate collaborative solutions that address the interests of all parties involved.
13. **Continuous Improvement:** Brainstorming can be integrated into a continuous improvement culture within an organization. By regularly conducting brainstorming sessions, teams can actively seek opportunities for innovation and improvement in all aspects of their work. This ongoing process of generating ideas and implementing changes leads to incremental advancements and ensures the organization remains adaptable and responsive to evolving needs.

In summary, brainstorming is a versatile technique that can be applied in various contexts, ranging from idea generation to strategic planning. It encourages creative thinking, collaboration, and innovation, making it a valuable tool for organizations and teams seeking to solve problems, develop new products, build stronger teams, and achieve their goals.

**Q16. What reports Accounts Departments will generate (minimum 5 reports) – 10 Marks**

The accounts department in an organization is responsible for managing financial transactions, recording financial data, and preparing various reports to provide insights into the financial health of the company. Here are some common reports that the accounts department typically generates:

1. **Financial Statements:** The accounts department prepares key financial statements, including:
   * Income Statement (Profit and Loss Statement): It summarizes the revenue, expenses, and net income or loss of the company over a specific period.
   * Balance Sheet: It provides a snapshot of the company's financial position by showing its assets, liabilities, and shareholders' equity at a specific point in time.
   * Cash Flow Statement: It tracks the inflow and outflow of cash from operating, investing, and financing activities, providing insights into the company's liquidity and cash management.
2. **Budget and Variance Reports:** The accounts department creates budget reports that compare the actual financial performance against the budgeted amounts. These reports highlight variances and help management understand where deviations occurred and take corrective actions.
3. **Accounts Payable and Receivable Reports:** The accounts department generates reports related to accounts payable and accounts receivable, including:
   * Accounts Payable Aging Report: It shows the outstanding payables, categorizing them based on their due dates. This report helps track and manage vendor payments.
   * Accounts Receivable Aging Report: It displays the outstanding customer invoices, categorizing them based on their due dates. This report aids in monitoring and collecting receivables.
4. **Financial Ratios and Analysis:** The accounts department may generate reports that analyse financial ratios to assess the company's performance and financial health. These reports may include profitability ratios, liquidity ratios, solvency ratios, and efficiency ratios, among others.
5. **Costing and Cost Analysis Reports:** The accounts department prepares reports to analyse the cost of products or services, including:
   * Cost of Goods Sold (COGS) Report: It calculates the direct costs associated with producing goods or delivering services.
   * Cost Variance Report: It compares the actual costs incurred with the budgeted costs, highlighting any deviations.
6. **Tax and Compliance Reports:** The accounts department generates reports to fulfill tax and regulatory requirements, such as:
   * Tax Returns and Filings: These reports include income tax returns, sales tax returns, and other tax-related filings.
   * Compliance Reports: These reports ensure adherence to relevant financial regulations, such as Generally Accepted Accounting Principles (GAAP) or International Financial Reporting Standards (IFRS).
7. **Management and Financial Analysis Reports:** The accounts department may prepare customized reports to provide management with financial insights and analysis. These reports may include key performance indicators (KPIs), financial forecasts, trend analysis, and variance analysis.
8. **Audit Reports:** The accounts department collaborates with external or internal auditors to generate reports that summarize the findings and recommendations from audits conducted on the company's financial records and processes.

In the scenario of implementing the Employees Loan Management System, the Accounts Department of TTS Company would generate several reports to ensure effective management and tracking of the loan process. Some of the reports that the Accounts Department might generate are:

* Loan Application Report
* Loan Approval Report
* Loan Rejection Report
* Loan Disbursement Report
* Loan Repayment Report
* Loan Interest Report
* Loan Balance Report
* Loan Provisioning Report
* Loan Aging Report

**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 - Rejection**

Dear [Employee's Name],

We hope this message finds you well. We would like to inform you about the status of your recent loan application. After careful consideration and review by our HR and Accounts departments, we regret to inform you that your loan application has been rejected.

We understand that this decision may be disappointing for you, and we want to assure you that it was made after a thorough assessment of various factors. The reason(s) for the rejection of your loan application is/are as follows:

1. Unstable employment history
2. Insufficient credit history
3. Low credit score

Please note that these reasons are specific to your application, and we encourage you to review them to better understand the decision. If you have any questions or require further clarification regarding the reasons provided, you can reach out to the HR department for assistance.

We understand the importance of financial assistance and assure you that this decision was not taken lightly. We encourage you to explore alternative options or consider seeking financial advice if necessary.

TTS Company values its employees and their well-being. While we were unable to approve your loan application at this time, we encourage you to continue working hard and exploring other opportunities for personal growth and development within the organization.

We appreciate your understanding and thank you for your cooperation. If you have any further questions or concerns, please do not hesitate to contact the HR department.

Best regards,

[HR Representative's Name]

[HR 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 Status - Approval**

Dear [Employee's Name],

We are pleased to inform you that your recent loan application has been approved by our HR and Accounts departments. Congratulations on your successful loan application!

We understand that this loan will be beneficial for you, and we would like to provide you with the following details regarding your approved loan:

**Loan Details:**

* Approved Loan Amount: Rs.15,00,000/-
* Interest Rate: 7.5%
* Loan Duration: 10 Years

**Loan Repayment Schedule:**

* Monthly Instalment Amount: Rs.10,431/-
* Number of Instalments: 120
* First Instalment Due Date: Feb 10, 2024.

Terms and Conditions: Before proceeding with the loan disbursement, we kindly request you to carefully review the attached document containing the terms and conditions associated with the approved loan. These terms and conditions outline important information such as repayment obligations, late payment charges, and any other relevant clauses. If you have any questions or concerns regarding the terms and conditions, please reach out to the HR department for clarification.

To accept the loan offer and proceed with the disbursement, please sign and return a copy of the loan agreement along with any required documentation by [Due Date]. Once we receive the necessary documents, the loan amount will be disbursed to your designated bank account.

Please note that the approved loan amount emi will be deducted automatically from your monthly salary as per the agreed-upon repayment schedule. This automated deduction will ensure timely repayments and hassle-free management.

We congratulate you once again on your approved loan application. We believe that this loan will help you achieve your financial goals. If you have any further questions or need assistance, please do not hesitate to contact the HR department.

Best regards,

[HR Representative's Name]

[HR Department]

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

**LOAN APPLICATION REPORT**

**10th Dec 2024**

| Application ID | Employee Name | Employee ID | Loan Amount (INR) | Loan Type | Requested Date | Status |
| --- | --- | --- | --- | --- | --- | --- |
| PL01 | Rajasekar S | 123456 | ₹ 1,00,000 | Personal | 01-12-2024 | Approved |
| HL02 | Kumaran R | 234561 | ₹ 9,50,000 | Home | 05-12-2024 | Pending |
| CL03 | Kannan T | 345621 | ₹ 2,00,000 | Car | 07-12-2024 | 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 decision will be communicated soon.
* For any queries or further information please contact the Accounts Department.

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

There are several reporting tools available that can be used to generate reports, depending on your specific requirements and preferences. Here are some commonly used reporting tools:

1. **Microsoft Excel:** Excel is a widely used tool for creating reports due to its flexibility and familiarity. It offers features for data analysis, charting, and creating visually appealing reports.
2. **Tableau:** Tableau is a powerful data visualization tool that allows users to create interactive and dynamic reports. It enables users to connect to various data sources, build visualizations, and share reports with others.
3. **Power BI:** Power BI is a business intelligence tool developed by Microsoft. It enables users to connect to multiple data sources, create visually appealing reports and dashboards, and share insights with others.
4. **SAP Crystal Reports:** Crystal Reports is a popular reporting tool used to design and generate reports from various data sources. It offers a wide range of features for report design, data integration, and distribution.
5. **QlikView:** QlikView is a business intelligence and data visualization tool that enables users to create interactive and intuitive reports and dashboards. It provides a drag-and-drop interface for data analysis and visualization.
6. **Google Data Studio:** Data Studio is a free web-based reporting tool offered by Google. It allows users to create dynamic and collaborative reports by connecting to various data sources and creating interactive visualizations.
7. **IBM Cognos:** Cognos is an enterprise reporting and business intelligence tool that offers features for report creation, analysis, and distribution. It provides a comprehensive set of capabilities for designing and delivering reports.
8. **Apache Superset:** Superset is an open-source data exploration and visualization platform. It allows users to create interactive dashboards and reports using SQL queries or a user-friendly interface.

These are just a few examples of reporting tools available in the market. The choice of a reporting tool will depend on factors such as the complexity of your data, visualization requirements, collaboration needs, and budget considerations.