

1.

The project management phases consist of the following:

- Initiation: The project's definition and initial goals are established during this stage of the project lifecycle.
- Planning: Creating a thorough plan for the project's execution is part of the planning process. This entails determining the tasks that must be carried out, determining the time and resources needed, and developing a risk management strategy.
- Execution: This stage sees the project's strategy put into practice. The project manager monitors development and ensures that the project stays on course as the team works to fulfill the tasks that have been identified.
- Monitoring and controlling: This stage entail keeping tabs on the project's development and ensuring that its objectives are being met. Additionally, the project manager will recognize any potential risks or problems and take action to reduce them.
- Closing: The project is finished at this stage of the project lifecycle, and the team is broken up. Any unfinished duties will be completed by the project manager, who will also make sure the project is successful.

2.

Briefly describe each of the following software development methodologies:

- Software development is traditionally done using the waterfall methodology. It is a sequential procedure in which each stage of the project must be finished before moving on to the following stage. For large, complex projects, the waterfall methodology is frequently employed.
- Multiple project phases are carried out concurrently when developing software using the parallel process. Although it can speed up overall development, this can also make management more difficult.
- V-Model: The V-model is a software development approach that combines testing and the waterfall approach. For undertakings that must be safe, the V-model is frequently utilized.
- Rapid Application Development (RAD) is an agile software development approach with a focus on producing usable software as soon as possible. For short-term, iterative projects, RAD is frequently employed.
- Agile Development: Agile development is a process for creating software that places a focus on adaptability and teamwork. Agile projects are divided into brief, iterative sprints, with the project plan being regularly reviewed and adjusted as necessary.