

SYSTEM ANALYSIS AND DESIGN

SE103.3

1. What are the project management phases consisting of when creating project plans?

- Initialization
- Planning
- Execution
- Controlling and monitoring
- Enclosure

2. Briefly describe each of the following software development methodologies.

➤ Waterfall development

The waterfall method is a rigid linear model that consists of sequential phases focusing on distinct goals. There is usually no process for going back to modify the project or direction.

➤ Parallel

Parallel development occurs when multiple developers are working on different versions of the same object for different hardware platforms.

➤ V-model

This model uses sequential phases paired with validation tests that allow the development team to set clear expectations and identify potential flaws throughout the process without needing a final build first.

➤ Rapid application development

RAD is an effective methodology that provides much quicker development and higher quality results than those achieved with other software development. The main objective of rapid application development is to accelerate the entire software development process.

➤ **Agile development**

This methodology is used to minimize risk by developing software in short time boxes which are called iterations that generally last for one week to one month.

3. Compare the difference between waterfall development and v-model development.

Waterfall development	v-model development
<ul style="list-style-type: none">• The cost of the Waterfall model is low.	<ul style="list-style-type: none">• V-model is expensive.
<ul style="list-style-type: none">• The flexibility of the Waterfall model is Rigid.	<ul style="list-style-type: none">• Flexibility of V-model is a Little flexible.
<ul style="list-style-type: none">• There is no way to return to the earlier phase.	<ul style="list-style-type: none">• There is no such constraint in V-model.
<ul style="list-style-type: none">• The waterfall model is a sequential execution process.	<ul style="list-style-type: none">• It is also a sequential execution process.
<ul style="list-style-type: none">• In the Waterfall model testing activities start after the development activities are over.	<ul style="list-style-type: none">• In V-model testing activities start with the first stage.
<ul style="list-style-type: none">• It is less costly as compared to V-model.	<ul style="list-style-type: none">• It involves more cost.