

- 1 Differentiate plan-driven and agile software development approach. 3
- 2 Explain the process of Software Specifications. 3

## **Module -1**

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|----|----|-------------------------------------------------------------------------------------------------|----|
| 11 | a) | What are the key phases of Boehm's Spiral Model, and how do they contribute to project success? | 10 |
|    | b) | What are the advantages of using the Spiral Model compared to other development models?         | 4  |
| 12 | a) | How does the Agile Manifesto serve as a guiding framework for Agile practices?                  | 7  |
|    | b) | What are the roles and responsibilities of team members in an Agile environment?                | 7  |

- 1 List out any three software process models. 3
- 2 What are the essential attributes of professional software engineering? 3

## **Module -1**

- 11 a) Explain the various stages of Waterfall model. Also list out any three situations where Waterfall model is only applicable. 7
- b) Explain the principles of Agile software development. 7
- 12 a) Mention the situations where Bohem's spiral model is used for software design. Also list out the advantages and disadvantages of spiral model. 7
- b) Explain software process activities. 7

- 1 Discuss the factors which are considered during the Components selection and design process. 3
- 2 How does an agile approach help software developers to capture and define the user requirement effectively? 3

### **Module -1**

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|----|----|--------------------------------------------------------------------------------------------------------------------------------------------|---|
| 11 | a) | Design Boehm's Spiral model and its importance.                                                                                            | 7 |
|    | b) | Illustrate how the process differs in agile software development and traditional software development with a socially relevant case study. | 7 |
| 12 | a) | Incremental model is better than water fall model for most business, e-commerce and personal systems. Justify the statement.               | 7 |
|    | b) | Describe the relevance of using Pair programming and Refactoring during Agile development process.                                         | 7 |

- 1 Outline the advantages of incremental development model over Waterfall model. (3)
- 2 Differentiate plan-driven and agile software development approach. (3)

### **Module -1**

- 11 a) Explain the major phases in waterfall model of software development. Which phase consumes the maximum effort for developing a typical software product? (7)
- b) You are given a project which involves many risks, that are difficult to anticipate at the start of the project. Which life cycle model is best suited for the project? Justify your answer. Explain that model in detail. (7)
- 12 a) Explain different process activities. (8)
- b) Explain Agile Development techniques and Agile Project Management. (6)