**PART – A**

**A**

**Answer any FIVE questions 5 X 5 = 25**

1. What is Software Engineering? What are its Characteristics?
2. Which model is used when staffing is unavailable? Explain?
3. Write the differences between S/W life cycle model & Process Model?
4. Discuss about System Engineering Hierarchy?
5. What is Feasibility Study? Explain the purpose of Feasibility Study?
6. Explain about Cohesion & Coupling?
7. Discuss about S/W design principles suggested by Davis?
8. What is S/W Testing? Discuss about Unit Testing?
9. What is S/W Metrics? Discuss about Function Point Metrics?
10. What is S/W Quality? Discuss about Quality of Design and Quality of Conformance?

**PART – B**

**Answer any ONE question from each unit 5 X 15 = 75**

**UNIT-I**

1. What are Process Models? Explain about Spiral Model with a Neat diagram?

**(OR)**

1. Explain about “V” Model in detailed with a neat diagram?

**UNIT-II**

1. What is a Data Model? Explain about ER Diagram and its various components with an example?

**(OR)**

1. What is DFD? Explain the guidelines for creating a DFD? Draw 0, 1 level DFD’s for Food Ordering System?

**UNIT-III**

1. What is S/W design? Explain about Transform Mapping and its design steps with an example?

**(OR)**

1. With a Neat Diagram explain about Pyramid Structure of Data Model?

**UNIT-IV**

1. What is Path Testing? Explain the steps carried out while performing Path Testing?

**(OR)**

1. Discuss about Regression Testing and Validation Testing?

**UNIT-V**

1. What is S/W Measurement? Discuss about Size Oriented Metrics & Defect Removal Efficiency?

**(OR)**

1. What is S/W Risk? Discuss about different types of risks?

**PART – A**

**B**

**Answer any FIVE questions 5 X 5 = 25**

1. What are the goals & Objectives of S/W Engineering?
2. What is S/W Process? Explain about Prototype Model along with Advantages & Disadvantages?
3. Write the differences between Functional and Nonfunctional Requirements?
4. Write the differences between Spiral Model and Waterfall Model?
5. What is Cardinality & Modality? Give an example?
6. What is UML? Discuss about Class Diagram and the Notations with an example?
7. Explain about various Testing activities?
8. Explain about Unit Testing?
9. What is Software Quality? Discuss about the Attribute for S/W Quality?
10. Write the differences between Reactive & Proactive Risk?

**PART – B**

**Answer any ONE question from each unit 5 X 15 = 75**

**UNIT-I**

1. Explain about Agile Process Model and its types?

**(OR)**

1. Explain about Incremental Mode & RAD Model?

**UNIT-II**

1. Explain about Web Engineering Process, Analysis Model for Web apps?

**(OR)**

1. What is a Control Flow Diagram? Explain the Process and how to draw a CFD?

**UNIT-III**

1. What is Transaction Mapping? Explain the Design steps with an example?

**(OR)**

1. What is S/W Architecture? Discuss about two types of Structural Partitioning with advantages

and disadvantages?

**UNIT-IV**

1. What is Black box Testing? Explain about System testing and various types of System Testing?

**(OR)**

1. What is Integration Testing? Explain about Top-Down Integration & Bottom-Up Integration?

**UNIT-V**

1. What is FTR? What are its objectives? Discuss about Review Meeting & Review Guidelines?

**(OR)**

1. Discuss about Service Oriented S/W Engineering?