Paper no. 1

Question no. 1

1. Explain the waterfall model. 13
2. List the umbrella activities followed in generic process model. 13
3. Define SRS. List the benefits of SRS. (3.12)38
4. Differentiate between waterfall model and spiral model/ short note on spiral (2-20)21
5. List the principles of agile methodology. 26
6. What is the need of feasibility study? Explain its types. 14

Question no. 2

1. State and explain the design modelling principles. 83
2. Differentiate between function-oriented design and object-oriented design. 86
3. What is coupling and cohesion / difference 89
4. List various types of Testing Metrics 96
5. What activities are included in design verification? 91
6. Explain the various cost estimation techniques. 107

Question no. 3

1. Explain different steps included during risk resolving. 118(9.3)
2. State and explain different types of risk. 118
3. Explain how RMMM helps in identifying the severity of risk. 122
4. Write a short note on Verification and Validation /difference 137
5. Define Six Sigma with its methodologies. 131
6. Explain the concept of testing with different levels of testing. 143

Question no. 4

1. State and explain the phases in SDLC.
2. Write a short note on spiral model 20
3. Explain COCOMO model. 109
4. List the basic principles of project scheduling. 112
5. Explain the bug life cycle. 140
6. State difference between White box testing and Black box testing 161

Paper no. 2

Question no. 1

1. Explain in brief the software development lifecycle.
2. List the advantages and disadvantages of incremental model.
3. What is agility? Explain XP in detail.
4. Write a short note on spiral model.
5. Define SRS. What are the characteristics of SRS?
6. Explain any 3 types of UML diagrams.

Question no. 2

1. Explain various testing metrics.
2. Define the various methods of design verification.
3. Discuss the various cost estimation parameters.
4. Write a short note on COCOMO Model.
5. Explain metrics of software quality.
6. What are the metrics for object-oriented design.

Question no. 3

1. State and explain different levels of testing.
2. Explain the bug life cycle.
3. Write a short note on White box testing and Black Box testing.
4. Differentiate between Verification and Validation.
5. Explain the different categories of Risk.
6. What are the factors of writing a good test plan?

Question no. 4

1. State and explain design modelling principles.
2. Draw use case diagram for Car Rental System.
3. Differentiate between coupling and cohesion.
4. Explain activity diagram with example.
5. State and explain the seven principles of Software Testing
6. What is the role of SQA? State the task of SQA.

Paper no. 3

Question no. 1

1. Why spiral model is called as Evolutionary model?
2. Explain Incremental Model with its advantages and disadvantages.
3. List components of SRS.
4. Explain Agile Development.
5. What is Software? Differentiate between software and hardware.
6. Design Software documentation for library management System by using following diagrams:

1)Use case Diagram

2)Sequence Diagram

Question no. 2

1. What are the metrics for object-oriented design?
2. How function-oriented approach is different than object-oriented approach.
3. Discuss the various design modelling principles.
4. Differentiate between coupling and cohesion.
5. What is COCOMO Model?
6. Describe types of coupling.

Question no. 3

1. Explain RMMM plan.
2. What is Project Scheduling? What are its basic Principles?
3. Explain different types of risk.
4. Differentiate between Software quality control and Software Quality Assurance.
5. What is Software Metrics? What are its Types?
6. Differentiate between Verification and Validation.

Question no. 4

1. Write a short note on CMM
2. Explain Six sigma.
3. What are the levels of testing?
4. List Testing Principles.
5. What is white box testing? What are its advantages? Explain any one method of it.
6. Explain Equivalence Partitioning.