

NOTE:

- 1. Answer question 1 and any FOUR from questions 2 to 7.**
- 2. Parts of the same question should be answered together and in the same sequence.**

Time: 3 Hours

Total Marks: 100

- 1.**
 - a) Explain the concept of Software product and Software process.
 - b) Describe the need of scheduling in software project management?
 - c) What is the need of formal technical reviews in Quality Assurance?
 - d) Define the term Cyclomatic Complexity.
 - e) What is the difference between LOC and Function Points size estimation techniques?
 - f) Discuss the need of CASE Tools.
 - g) What are the advantages of Object Oriented Design?

(7x4)

- 2.**
 - a) Explain RAD model and its applications.
 - b) Explain the different methods of doing requirement gathering and analysis.
 - c) Explain different types of Cohesion.

(6+6+6)

- 3.**
 - a) Define the terms Abstraction, Refinement and Modularity in the context of Software Design?
 - b) Differentiate between System Design and Logical Design.
 - c) What is Auditing in Software Configuration Management?

(6+6+6)

- 4.**
 - a) What is the purpose of Extension and Inclusion association in Use Cases? Explain with the help of an example?
 - b) What do you understand by Black Box testing? Explain:
 - i) Boundary Value Analysis
 - ii) Equivalence partitioning
 - c) Define Regression testing and Acceptance testing.

(6+6+6)

- 5.**
 - a) Describe Graphical User Interface Design.
 - b) What is Verification and Validation?
 - c) Describe all levels of CMM.

(6+6+6)

- 6.**
 - a) What is Change Control Process? Explain.
 - b) Explain the process of Reverse Engineering.
 - c) Explain the difference between DFD and ERD.

(6+6+6)

- 7.**
 - a) Explain software quality factors: FURPS
 - b) Describe function based metrics.
 - c) Describe a Software Agent and its applications.

(6+6+6)