

(3 Hours)

100 Marks

N.B. (1) Question No. 1 is compulsory.

(2) Attempt any four questions out of remaining six questions.

(3) Assume data if required and state clearly.

- 1 (a) Construct Class Diagram and Sequence Diagram for Railway Reservation System. 10
- (b) Construct Use Case Diagram and Activity Diagram for ATM activities. 10
- 2 (a) Explain the Open Source Software lifecycle model. 10
- (b) What do you mean by requirements? Explain functional and non functional requirements in detail. 10
- 3 (a) Explain COCOMO model used for software estimation. 10
- (b) Explain and compare FTR and walkthrough. 10
- 4 (a) Explain different types of coupling and cohesion. 10
- (b) Explain in detail about different levels of CMM with their characteristics. 10
- 5 (a) Explain the Software Configuration Management and Change Control Management in detail. 10
- (b) What are different types of maintenance and also explain steps for creating maintenance logs. 10
- 6 (a) What is software quality assurance? Explain different quality matrices. 10
- (b) Differentiate between static modeling and dynamic modeling in detail. 10
7. Write short notes on (any Two) 20
- (a) Software Architectural style.
- (b) Reverse and Reengineering.
- (c) Risk Management
- (d) Task network and Timeline Chart