



- (b) (i) Explain the various levels of capability maturity model intergration. (10)
- (ii) What are the pros and cons of using mathematical approach for software development? (6)
12. (a) Explain the software requirement engineering process with neat diagram. (16)
- Or
- (b) Consider an online railway reservation system, which allows the user to select route, book/cancel tickets using net banking/credit/ Debit cards. The site also maintains the history of the passengers. For the above system, list and draw the use case scenario and model the above specification using data flow diagram. (16)
13. (a) Explain the cohesion and coupling types with examples. (8 + 8)
- Or
- (b) Discuss about User Interface Design of a Software with an example and neat sketch. (16)
14. (a) A Program specs state the following for an input field: The program shall accept an input value of 4-digit integer equal or greater than 2000 and less than or equal 8000. Determine the test cases using
- (i) Equivalence class partitioning
- (ii) Boundary value analysis (8 + 8)
- Or
- (b) Explain unit testing and integration testing process with an example. (16)
15. (a) Explain in detail about the risk management in a software development life cycle. (16)
- Or
- (b) (i) Discuss about COCOMO II model for software estimation. (10)
- (ii) Discuss about the metrics for small organizations. (6)

