Q.P. Code : 581402

(3 HOURS) [Total Marks: 80]

N.B.: (1) Question no. 1 is compulsory.

(2) Attempt any three questions from remaining.

(3) Assume suitable data wherever necessary.

Q1. (a) Define a system. Write key differences between structured and object oriented analysis and design. 10

(b) Explain software development life cycle used for system analysis. 10

Q2. (a) What is cost benefit analysis? Illustrate any one model of cost benefit analysis. 10

(b) Draw the use case diagram for online railway reservation system with extend, include and generalize relations between use cases. 10

Q3. (a) Explain different requirement gathering techniques used in system analysis. 10

(b) Define cohesion and coupling. Explain different types of coupling. 10

Q4.(a) What is significance of user interface in system development? Draw graphical user interface for online shopping system. 10

(b) What is data flow diagram (DFD)? What are the steps to draw DFD? Explain with example. 10

Q5.(a) Assume that the library management system is deployed in client server architecture. Explain the various components and its deployment using diagrams. 10

(b) Draw sequence diagrams for online course registration in university for checking course availability, student eligibility before confirmation of registration. 10

Q6. (a) Explain software requirement specification (SRS) document with example. 10

(b) Explain boundary class, entity class and control class with UML notations. 10