Q.P Code: 24566

(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) What is system? Which are the components of system? What are the differences between structured and object oriented system? **(10)**

(b) Explain Business process re-engineering [BPR] of business processes. **(10)**

Q2. (a) What is cohesion and coupling in the context of software design? Explain different types of coupling. **(10)**

(b) Draw class diagram (minimum 4 classes) for customer complaint management system showing different relationships between classes. **(10)**

Q3. (a) What is the importance of data flow diagram (DFD) in structured analysis and design? Draw DFD for suitable example. **(10)**

(b) What are the different types of cost-benefit analysis? Explain ROI method with example. **(10)**

Q4. (a) What is the use of deployment and component diagram? Prepare deployment and component diagram for ATM system. **(10)**

(b) Explain modeling application architecture. **(10)**

Q5. (a) Explain the need for system integrity, control and security. **(10)**

(b) What is the purpose of use case diagram? Draw use case diagram with include and extends relationships for railway reservation system. **(10)**

Q6. Write short notes (any two) **(20)**

a) SRS document
b) Design of user interface
c) Requirement gathering techniques
d) Boundary class, entity class and control class
