

- 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
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