

(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 Answer the following:

[20]

- a) What is Unified Modeling Language (UML)? Explain need for UML.
- b) Explain software development life cycle used for system analysis.

Q2 a) Explain purpose of use case diagram with example.

[10]

b) What are the different types of cohesion and coupling? Explain in short.

[10]

Q3 a) What is the purpose of system proposal? Explain with example.

[10]

b) Explain different requirement gathering techniques.

[10]

Q4 a) Explain various steps involved in SRS document with suitable example.

[10]

b) Explain importance of class diagram in system design with example.

[10]

Q5 a) Explain the need of sequence diagram with example.

[10]

b) What are the different types of cost -benefit analysis? Explain any one in short.

[10]

Q6 Write a short notes on (any two)

[20]

- a) Application Architecture
  - b) Zachman framework
  - c) Boundary class, entity class and control class
  - d) Data flow diagram (DFD)
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