Q.P. Code: **37072**

(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 Unified Modeling Language (UML)? Explain need of UML with examples. (10)

(b) Explain the development of SRS document for any suitable case study. (10)

Q2. (a) Explain different steps to draw DFD with suitable example. (10)

(b) Draw and explain class diagram for car rental management system. (10)

Q3. (a) Explain types of cohesion and coupling in software design. (10)

(b) What is feasibility analysis? Explain payback analysis with example. (10)

Q4. (a) How to identify use case and actors for use case diagram? Identify use cases & actors and draw use case diagram for online book shopping. (10)

(b) Explain requirement gathering techniques used in system analysis. (10)

Q5. (a) Explain different elements of activity diagram with suitable example. (10)

(b) What is use of sequence diagram in system design? Draw sequence diagram for ticket vending machine. (10)

Q6. Attempt the following (any two) (20)
   a) User Interface Design
   b) Component and deployment diagram
   c) Zachman framework
   d) System security and integrity measures