(3 Hours)                                                      [Total Marks : 100
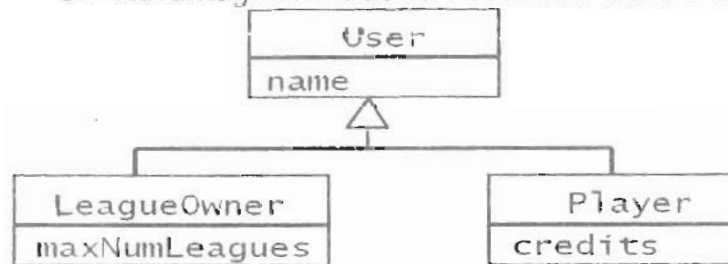
Q1    For Hospital Management Information System:                          (20)
      a.  Write down the functional and non-functional requirement.
      b.  Draw Use Case Diagram.
      c.  Draw Class Diagram.

Q2 A) Realized Inheritance to database table for the given model.          (12)
      1>  Do Vertical Mapping.
      2>  Do Horizontal Mapping.
      3>  Advantage and tradeoff between these two methods.



Q2 B) Following is the Bidirectional many-to-many association - Object design model before
      transformation.                                                      (8)



      Write Java code after transformation for Mapping Association.

Q3 A) Explain in detail about different levels of CMM with their characteristics.    (10)

Q3 B) Explain all phases of the SDLC.                                       (10)

Q4 A) Explain with an example Cohesion and Coupling.                        (10)

Q4 B) Explain in detail RAD software life cycle model.                      (10)

Q5 A) Explain and compare  FTR  and  Walkthrough.                          (10)

Q5 B) What is SCM? Explain in detail Software Configuration Item identification. (10)

Q6 A) Compare Forward Enginering, Reverse Engineering and Re-Engineering.   (10)

Q6 B) Explain in detail COCOMO model.                                       (10)

Q7) Short Notes on any two:                                                 (20)
      a.  Integration Testing
      b.  Types of Maintenance
      c.  Design Pattern
      d.  Risk Management