

Question Paper

Exam Date & Time: 17-Jan-2024 (09:30 AM - 12:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

INTERNATIONAL CENTRE FOR APPLIED SCIENCES END SEMESTER THEORY EXAMINATIONS NOVEMBER/DECEMBER 2023 III SEMESTER B.Sc.(APPLIED SCIENCES) IN ENGG.

Software Design Using Object Oriented Paradigm [ICS 232]

Marks: 50

Duration: 180 mins.

Answer all the questions.

Missing data, if any, may be suitably assumed

- 1) An organization wants to list requirements for its automation. Enlist the different parts of SRS document. (3)
 - A)
 - B) Enlist the different parts of Use Case Diagram. Give at least 5 use cases, and draw the Use Case Diagram, for Renting or Returning Video cassettes, in a Video Shop. (4)
 - C) What do you mean by Use Case Description. Give Use Case Description for all use cases of Q 1 B) (3)
- 2) What are the symbols of Class Diagrams and symbols for Class Relationships? (4)
 - A)
 - B) Give Sequence Diagram and Collaboration Diagram for all use cases of Library System. (3)
 - C) What are the symbols of State Chart Diagram? How states are different from activities? Explain. (3)
- 3) Enlisting the Swim lanes and Activities, draw the Activity Diagram for all use cases of Academic System. (5)
 - A)
 - B) Give the basic parts of JAVA program. Write a program in JAVA for printing Hello World on the screen. (5)
- 4) What are Constructors in JAVA? Write a program in JAVA, to exhibit Constructors. (5)
 - A)
 - B) Write a program in JAVA, to check whether a number is Palindrome. (5)
- 5) Give Activity Diagram, Use Case Diagram, Class diagram, Interaction Diagrams for maximum 5 use cases, for Sports System in ICAS, and give (10)

its code in either, C or C++ or JAVA.

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