Question Paper

MANIPAL ACADEMY OF HIGHER EDUCATION

INTERNATIONAL CENTRE FOR APPLIED SCIENCES
END SEMESTER THEORY EXAMINATION - DECEMBER 2022
III SEMESTER B.Sc (Applied Sciences) in Engg.

Software Design Using Object Oriented Paradigm [ICS 232 - S2]

Marks: 50   **Duration: 180 mins.**

Answer all the questions.

Missing data may be suitably assumed.

1)

A) Write a JAVA program to sort numbers in ascending and descending order using Bubble Sort. (3)

B) What are final and super keywords in JAVA? Show with programs. (3)

C) Find area of rectangle, triangle and square, using the abstract class definition, using JAVA programing language. (4)

2)

A) What are Constructors in JAVA? Explain with program. (3)

B) What are the rules to draw Use Case Diagrams? Explain with an example. (3)

C) We need to develop the following Time Management Software for a company:
The company needs to develop a time management system for its executives. The
software should let the executives register their daily appointment schedules. The
information to be stored includes person(s) with whom meeting is arranged, venue,
the time and duration of the meeting, and the purpose (e.g. for a specific project
work). When a meeting involving many executives, and arrange a meeting (i.e. make
relevant entries in the diaries of all the concerned executives) at that time. It should
also inform the concerned executives about the scheduled meeting through e-mail. If (4)