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School of Computing Science and Engineering

Bachelor of Computer Applications

Mid Term Examination - May 2024

Duration : 90 Minutes

Max Marks : 50

Sem II - E1UA203C - Object Oriented Programming using C++General Instructions*Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

- 1) Explain constants. Give the syntax for declaring constants in C++? K2 (2)
- 2) What role do classes and objects play in the object-oriented programming paradigm, and how are they related to each other? K1 (3)
- 3) Explain the key principles of object-oriented programming (OOP) and illustrate their differences from other programming paradigms. K2 (4)
- 4) Explain copy constructor. What is the syntax for defining a copy constructor? K2 (6)
- 5) Explain the concept of inheritance. What are the various types of inheritance. K3 (6)
- 6) Create a C++ program that defines a function to compute both the area and circumference of a circle. After defining the function, call it from the main function of the program. K3 (9)
- 7) Write a C++ program to find the second largest element in an array of integers. K4 (8)
- 8) Do comparison among for, while and do-while loop in C++. Write a program to print the sum of all odd numbers from 1 to N using a while loop. K4 (12)

OR

Implement a program to create a class of employee to store its detail (Emp no, name, designation, department, monthly salary). Take input of 5 such employees and print the details of all employees whose salary is >60,000. K4 (12)