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**Presidency University**

**Bengaluru**

**School Of Computer Science and Engineering & Information Science**

**Summer Term End-Term Examinations, Aug 2024**

**Date**: 5.8.2024

**Time**: 9:30 AM to 12:30 PM

**Max Marks**: 100

**Weightage**: 50%

**Odd Semester**: 2023 - 24

**Course Code**: CSE 3091

**Course Name**: Programming in C# and .net

**Department: SOCSE**

**Instructions:**

1. *Read the all questions carefully and answer accordingly.*
2. *Do not write any matter on the question paper other than roll number.*

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| **Q.No** | **Questions** | **Marks** | **CO** | **RBT** |
| 1 | 1. Explain the advantages of Common Type System | 4 | CO1 | L1 |
| 1. Ms. Thompson, a class teacher, is keen on calculating the total marks and average marks of her students to understand the overall performance of her class. help her calculate the total marks and average marks of the class. | 6 | CO1 | L2 |
| 1. Write a program that takes user inputs for employee number (empno) and displays all details of the employee, including empname, designation, basic salary, and total salary. Assume that the employee details are stored in a dictionary where empno is the key, and the corresponding values are empname, designation, basic salary, and total salary. | 10 | CO1 | L3 |
| OR | | | | |
| 2 | 1. List the types of Constructors. | 4 | CO1 | L1 |
| 1. Create class called Employee with id and salary. Employee class is inheriting from Man class. Man is inheriting from Human class. Name and age should be defined in Human and Man class respectively. Include display method in Employee class to display all details. | 6 | CO1 | L2 |
| 1. University wants to store the student details. Get the student details such as Roll number, fname, lname, Semester, Specialization and display all details. Read the user inputs using console. | 10 | CO1 | L3 |

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| 3 | 1. Write the syntax for Delegate. | 4 | CO2 | L1 |
| 1. Illustrate and Explain different components of CLR Architecture. | 6 | CO2 | L2 |
| C. Create a Simple Web form to show a welcome message and Connect with various departments of University. (CO4) [Apply] | 10 | CO2 | L3 |

OR

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| 4 | 1. List the types of CTS. | 4 | CO2 | L1 |
| 1. Write a C# Program to find out the area of the triangle , square, and rectangle using method overloading. | 6 | CO2 | L2 |
| 1. Write a C# program that greets users with a personalized welcome message using command-line arguments. The program should accept the user's name as a command-line argument when executing the program and display a welcome message accordingly. | 10 | CO2 | L3 |

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| 5 | 1. Define Array and list the types of Array. | 4 | CO3 | L1 |
| 1. Developer is writing code for dividing two numbers. If the user enters 0 in the second number, an exception should be raised. Handle the exception with the appropriate code. | 6 | CO3 | L2 |
| 1. A class teacher wants to calculate the sum and average of her students' marks for a particular subject. Write a C# program that should first prompt the user to enter the number of students. Then, it should accept the marks of each student as input. Finally, the program should calculate and display the sum and average of the marks. | 10 | CO3 | L3 |

OR

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| 6 | 1. Explain how performance is measured in CLR | 4 | CO3 | L1 |
| 1. Illustrate and explain different functions of .Net Architecture. | 6 | CO3 | L2 |
| 1. A university wants to efficiently manage and store student details in its database. develop a C# program to effectively capture Roll number, first name, last name, Semester, and Specialization from the user via the console. | 10 | CO3 | L3 |

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| 7 | 1. Define Inheritance and write the syntax for multiple Inheritance . | 4 | CO4 | L1 |
| 1. Calculate the salary of an employee using Command line arguments. Provide Basic, commission using Command Line arguments. (15% of basic is HRA and 30% of basic is DA) | 6 | CO4 | L2 |
| 1. Write a code to show the concept of delegate for encapsulating different methods | 10 | CO4 | L3 |

OR

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| 8 | 1. Describe types of Exception. | 4 | CO4 | L1 |
| 1. Illustrate and explain different functions of .Net Architecture. | 6 | CO4 | L2 |
| 1. Imagine you are tasked with developing a C# program to analyze data stored in an array. The program needs to search for a specific number within the array and determine the number of times it appears. | 10 | CO4 | L3 |

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| 9 | 1. Describe two main components of .Net Framework. | 4 | CO1 | L1 |
| 1. Calculate the salary of an employee using Command line arguments. Provide Basic, commission using Command Line arguments. (15% of basic is HRA and 30% of basic is DA) | 6 | CO1 | L2 |
| 1. A university wants to efficiently manage and store student details in its database. develop a C# program to effectively capture Roll number, first name, last name, Semester, and Specialization from the user via the console. | 10 | CO1 | L3 |

OR

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| 10 | 1. Mention different types of applications supported by .NET. | 4 | CO2 | L1 |
| 1. Write a code to show the concept of delegate for encapsulating different methods | 6 | CO2 | L2 |
| 1. Imagine you are tasked with developing a C# program to analyze data stored in an array. The program needs to search for a specific number within the array and determine the number of times it appears. | 10 | CO2 | L3 |