

Total No. of Questions – [2]

Total No. of Printed Pages: 2

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| G.R. No. | |
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| PAPER CODE | 0124-383 |
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March 2024 (INSEM) EXAM
F.Y.B. TECH. CESE (SEMESTER - II)
COURSE NAME: Programming And Problem Solving-II
COURSE CODE: SE12233
(PATTERN 2023)

Time: [40 min]

[Max. Marks: 20]

Instructions to candidates:

- 1) **Figures to the right indicate full marks.**
- 2) **Use of scientific calculator is allowed**
- 3) **Use suitable data wherever required**
- 4) **Solve any two sub questions from Question 1 and 2**

| Question No. | Question Description | Marks | CO mapped | Blooms Taxonomy Level |
|--------------|--|-------|-----------|-----------------------|
| Q.1 | a) Can you explain the fundamental difference between C++ and Java in terms of their approach to memory management and platform independence? Provide examples to illustrate these distinctions. | [5] | 1 | Understanding |
| | b) Describe JVM (java virtual machine), JRE (java runtime Environment) and JDK (java development kit) in the context of java development with diagram. | [5] | 1 | Understanding |
| | c) Explain variable and types of variables. | [5] | 1 | Understanding |
| Q2 | a) Develop a Java program that takes an array of 5 float elements and calculate their sum. | [5] | 2 | Apply |
| | b) Develop a java class named Car representing a car with instance variables for model, year and color. Implement a parameterizes constructor that initializes these variables. Ensure that the constructor validates the input values and provide default values if necessary. | [5] | 2 | Apply |

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| | c) Using java programming ask the user for a number n and prints all the numbers from 1 to n. | [5] | 2 | Apply |
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