

FINAL [MOCK] EXAM FALL SEMESTER 2024

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| COURSE NAME: | Computer Programming | COURSE NUMBER: | 4-CPR-11-386 |
| EXAMINATION DATE: |  | EXAMINATION TIME: |  |
| EXAMINATION DURATION: | 50 mins | EXAM VERSION: | MOCK |
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| ADDITIONAL  MATERIALS ALLOWED  TO USE: | Book(s), Notebook(s), Copybook(s) allowed, NOT paper notes. Any electronic device (laptop, smartphone, tablet, smart watch) not allowed. | | |

Please do not open the examination paper until directed to do so.

Your answer will be marked based on the following assessment criteria:

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| 1. | Relevance of the answers to the question, proper examples provided | 40% |
| 2. | Creativity, variety, individuality towards the answer provided | 20% |
| 3. | Any extra attempt from student to fulfill the answers | 15% |
| 4. | Proper order of organization of the answer with clear written form | 25% |

Additional Feedback:

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| MARK (DO NOT FILL): |  |

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| STUDENT ID NUMBER |  | Name: |  |

*Computer Programming* ***MOCK***

**Final examination 100 points**

Part 1 (25 points)

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| *1. Describe the pointer variable, how it is stored in memory (RAM), what characteristics it has in memory storage (****4, points****):* |
| *answer:* |
| *2. Describe characteristics of vector data structure, mention any 4 characteristic:* |
| *answer:* |
| *3. Explain recursive programming and try to give simple example:* |
| *answer:* |
| *4. Consider a Class Dish with attributes name : string, cost : int. Write* ***C++ code snippet function*** *below for overloading operator “****+”*** *The function should add the cost of both objects and return the summation of it (****15, points****):* |
| *answer below:* |

Part 2 (35 points)

Mention any ***5 functions of the vector data structure with description*** and ***give C++ example snippet code*** of using it:

|  |  |
| --- | --- |
| *code snippet 1:* | *code snippet 2:* |
| *code snippet 3:* | *code snippet 4:* |
| *code snippet 5:* | |

Part 3 (40 points)

This is a integer data type two-dimensional array int myArr[4][4]; Write a ***nested for loop to initialize*** two dimensional array and another ***nested for loop to print*** the values. Please, ***use new line*** and ***set width*** components to make the output formatted. *No need to mention main function, libraries, only provide answer as code snippet*:

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| --- |
| *answer C++ code snippet here:* |

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