|  |  |  |  |
| --- | --- | --- | --- |
|  | | | |
| **Name of Student** |  | **Reg. No.** |  |
| **Subject** | Programming Fundamentals | **Program** | CS |
| **Facilitator** | Mrs. Naheed Sattar | **Time** | 2.5 hours |
| **Students** | 41 | **Maximum Marks** | 40 |
| **Date** | 23-01-2025 | **Section Code** | 032410102 |

**INSTRUCTIONS:**

* All questions are compulsory.
* Read the questions carefully first and then answer them.
* There is no short cut to success so the best way for success here would be to think and think.
* Please give precise, specific answers rather than playing with words.

**(CLO\_1):  (Cognitive Level C2, GA\_1, i.e., Basic Problem Solving)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Q.1** | **Estimated Time To Complete Question (15 Minutes)** | **CLO1** | **Max Marks 06** |

**List** answers to the following questions:

* 1. Write a small introduction to arrays. (03)
  2. What are the uses of an array.  (03)

**(CLO\_2):  (Cognitive Level C3,  GA2 i.e Applying basic programming)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Q.2** | **Estimated Time To Complete Question (10 Minutes)** | **CLO2** | **Max Marks 05** |

**Identify** a program to find the largest integer value in an integer array. The integer value and the integer array both will be entered by the user.

**(CLO\_3):  (Cognitive Level C3, GA3 i.e Implement algorithms)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Q.3** | **Estimated Time To Complete Question (15 minutes)** | **CLO3** | **Max Marks 05** |

**Implement** an enum datatype of all the months in a year. Let the user enter a month. Your program will then check if that month entered by the user exists in the enum list or not. Print the messages accordingly.

**(CLO\_3):  (Cognitive Level C3, GA3 i.e Implement algorithms)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Q.4** | **Estimated Time To Complete Question (40 minutes)** | **CLO3** | **Max Marks 15** |

**Implement** programs for the following:

1. Ask the user to enter string values of animals in a vector. (03)
2. Print the string values of animals in the vector using the iterator class. (03)
3. Delete all the vector elements from a vector using two methods. (03)
4. Find “Zebra” in the Vector. (03)
5. Replace “Dog” with “Giraffe”. (03)

**(CLO\_2):  (Cognitive Level C3, GA\_2, i.e., Applying basic programming)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Q.7** | **Estimated Time To Complete Question (20 minutes)** | **CLO2** | **Max Marks 05** |

**Identify** the output of the following programs:

|  |  |
| --- | --- |
| **b) (02)**  public class final  {  public static void main (String args[])  {  String str=”JAVA”  char ch1 =str.charAt(2);  char ch2 =str.charAt(3);  System.out.println(ch1);  System.out.println(ch2);  }  } | **c)** **(03)**  public class final {  public static void main (String args[])  {  int[] myArray = {2, 4, 6, 8, 10};  int[] otherArray={0,0,0,0,0};  for (int i=0; i<4; i++)  {  otherArray[i]=myArray[i] \* myArray[i];  System.out.println(“The number” + i+1+ otherArray[i]);  }  }  } |

**(CLO\_2):  (Cognitive Level C3, GA\_2, i.e., Applying basic programming)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Q.8** | **Estimated Time To Complete Question (20 minutes)** | **CLO2** | **Max Marks 04** |

**Identify** the errors in the following programs:

|  |  |
| --- | --- |
| **a) (02)**  public enum Planets{  Jupiter (500),  Saturn(3000),  Mars(2500);  int lightYears;  Planets (int lightyears,price)  {  Planets.lightYears=lightYears;  Planets.price=price;  }  } | **b) (02)**  public class final {  public static void main (String[] args)  {  String[] cars = {"Volvo", "BMW", "Ford", "Mazda"};  for (int i=0; i<10; i++)  {  System.out.println(cars[i]);  }  }  } |