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| Subject code & Name | : | **CE144 – Object oriented programming with C++** | Practical | : | **3** | Academic Year | : | **2022-2023** |
| ID | : | **22CS044** | Name | : | **Shruti Panchal** | | | |

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| ***Practical Set - 3*** |
| **Aim 3.1:** Find output of the following code.  **Expected Output:**  Attach the screenshot of output and fill up the below given table.   |  |  |  |  | | --- | --- | --- | --- | | Sr. No. | Questions | Output | Remarks | | 1. | Can we assign NULL value to reference variable? | NO | We cannot assign a NULL value to the reference variable. | | 2. | Is Reference variable a pointer variable? | NO | Reference variable is not a pointer variable. | | 3. | Can we declare an array of references? | NO | We cannot declare an array of reference. | | 4. | Can we declare a reference variable without initializing it? | NO | We cannot declare a reference variable without initializing it. | | 5. | Does Reference Variable change the  original value of variable? | YES | Reference variable changes the original value of variable. | |
| ***Code*** |
|  |
| ***Output*** |
|  |
| **Aim 3.2:** Find output of the following code. |
| ***Code*** |
|  |
| ***Output*** |
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| ***Question-Answers*** |
| 1. **State the reason for creating object of class.**   **Ans.** We are creating objects to use data members and member function of the class which has been created. |
| **Aim 3.3:** Write a program to enter a size of array. Create an array of size given by user using “new” Dynamic memory management operator (free store operator). Enter the data to store in array and display the data after adding 2 to each element in the array. Delete the array by using “delete” memory management operator.  **Expected Output:**  Fill the following table to showcase your outcome, also attach the screenshot of output.   |  |  |  | | --- | --- | --- | | **Size of Array:** | **5** | **3** | | **Array Elements:** | **3,6,9,4,7** | **2,6,4** | | **After adding two elements:** | **5,8,11,6,9** | **4,8,6** | |
| ***Code*** |
|  |
| ***Output*** |
|  |
| ***Question-Answers*** |
| 1. **Where the new operator does allocate memory in system?**   **Ans.**  The new operator is used to dynamically allocate memory for the variable on the heap, which is a region of memory that remains allocated until explicitly deallocated using the delete operator.   1. **State two points on delete operator.**   **Ans.**   * Delete is an operator that is used to destroy array and non-array objects which are created by new expression. * The delete operator has void return type does not return a value. |
| **Faculty Signature: Grade:** |