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| --- | --- | --- |
| **Questions** | **Marks** | **Students scored** |
| Question 1 | (10 Marks) |  |
| Question 2 | (10 Marks) |  |
| Question 3 | (10 Marks) |  |
| Question 4 | (10 Marks) |  |
| Total | (40 Marks) |  |

**Question 1: (5 Marks)**

Put your answers of question 1 (**multiple choice questions**) in the following table:

|  |  |
| --- | --- |
| **Question** | **Answer** |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 1: Multiple Choice(10 Marks)**  **1. Which of the following in correct regarding constructor?**  **[A] class name and constructor name is same**  **[B] constructor does not return value**  **[C] constructor has return type**  **[D] Both A and B are correct.**  **[E] All are correct.**  **2. Which of the following is a return type?**  **A] void [B]  int [C] double [D] All of the above E]  None of the above**  **3. What will be used when terminating a structure? A] : [B] } [C]  ; [D]  ;;**  **4. What is the output of the following code?**  **#include <iostream>**  **#include <string>**  **using namespace std;**  **main() {**  **int a[] = {10, 20, 30};**    **cout<<a[2]+1;**  **}**  **[A] 10 [B] 20 [C] 31 [D] 21**  **5. Which of the following correctly declares an array? [i] int array[ ]={12,14,15,16}; [ii] int array[4]={12,14,15,16}; [iii] array={12,14,15,16}; [iv] array[]= (12,14,15,16);**  **[A] i and iii [B] ii and iii [C] i and ii [D] iv**  **6. #include<iostream>**  **using namespace std;**  **int main ()**  **{**  **int array[] = {0, 2, 4, 6, 7, 5, 3};**  **int n, result = 0;**  **for (n = 0; n < 6; n++)**  **result += array[n+1];**    **cout << result;**  **return 0;**  **}**  **[A] 27 [B] 25 [C] 28 [D] 17**  **Question 2:**  **Question: 2(a) (3 Marks)**    **Give the output for the following questions when the value of n is 15**  **#include <iostream>**  **using namespace std;**  **int main()**  **{**  **int n, sum = 0;**  **cout << "Enter a positive integer: ";**  **cin >> n;**  **for (int i = 1; i <= n; ++i) {**  **sum += i;**  **}**  **cout << "Sum = " << sum;**  **return 0;**  **}**   |  |  | | --- | --- | | **Output** |  |   **Question: 2(b) (3 Marks)**  **#include <iostream>**  **#include <string>**  **using namespace std;**    **int main() {**  **int a[] = { 2001, 2005, 3050, 1000};**  **cout << a[0+1] << endl;**  **cout << a[0] << endl;**  **cout << a[3] << endl;**  **return 0;**  **}**   |  |  | | --- | --- | | **Output** |  |   **Question: 3(c) (5 Marks)**  **Find the sum of all the numbers in “Nums” using a for loop. The loop should print 25.**  **Question 4: (10 Marks)**  **#include <iostream>**  **using namespace std;**  **class Employee**  **{**  **private:**  **int Studentid[5];**  **string Studentname[5];**    **public:**  **Employee();**  **Employee(int studentid[], string studentname[]);**  **void display();**        **};**  **Employee::Employee()**  **{**  **for(int i=0; i<5; i++)**  **{**    **Studentid[i]=0;**  **Studentname[i]="";**    **}**    **2. what are the attributes in the above program?**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(0.5 Marks)**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(0.5 Marks)**  **2. How many constructors are there?**  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(1 marks)  **3. what is the size of the array?**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(1 Marks)**  **4. what is the method name?**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(1 Marks)**  **5. what is the objects name?**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(1 Marks)**  **6. what is the output for the above program?**  **(4 Marks)** | **7. #include <iostream>**  **using namespace std;**  **int variable()**  **{**  **int x=2;**  **return x;**  **}**  **int main()**  **{**  **switch(variable())**  **{**  **case 1 :**  **cout << "Hi" << endl;**  **break;**  **default :**  **cout << "Hello" << endl;**  **}return 0;**  **}**  **[A] Hello [B] Hi [C] HelloHi [D] Compile error**  **8. Which of the following is a valid class declaration?**  **[A] class A { public: int x; };**  **[B] class B { }**  **[C] public class A { }**  **[D] object A { int x; };**  **9. What is the output of this program?**  **#include**  **using namespace std;**  **int main()**  **{**  **int a;**  **a = 5 + 3 \* 5;**  **cout << a;**  **return 0;**  **}**  **[A] 35 [B] 20 [C] 25 [D] 30**  **10. What is the index number of the last element of an array with 9 elements? [A] 9 [B] 8 [C] 0 [D] Programmer-defined**  **Question: 2(c) (4 Marks)**  **What would be printed from the following C++ program?  #include<iostream> using namespace std; int main(){   int arr[5]={1,3,5,7,9};**  **for(int i=0;i<5;i++) //output arr array        cout<<arr[i]\*arr[i]<<"\t";**  **return 0;**  **}**   |  |  | | --- | --- | | **Output** |  |   **Question 3:**  **Question: 3(a) (2 Marks)**  **Create an integer array “Nums” of size 5.**  **Question: 3(b) (3 Marks)**  **Put the values 5, 1, 3, 7, 9 in the array “Nums”.**  **Employee:: Employee(int studentid[], string studentname[])**  **{**  **for(int i=0; i<5; i++)**  **{**    **Studentid[i]=studentid[i];**  **Studentname[i]=studentname[i];**    **}**    **}**    **void Employee::display()**  **{**    **for(int i=0; i<5; i++)**  **{**  **cout<<"The student id is "<<Studentid[i]<<endl;**  **cout<<"The student name is"<<Studentname[i]<<endl;**      **}**  **}**      **int main()**  **{**  **int studentid[]={1234,2345,4567,6789,1256};**  **string studentname[]={"Mohammed",**  **"ahmed","Sohail","Abubakker","Omer"};**  **Employee emp,emp1(studentid,studentname);**    **emp1.display();**        **}**  **From the above program answer the following questions**  **1. What is the class name of the above program?**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(1 marks)** |