**Student Declaration**

I\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Registration No.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, hereby declare that by attempting the paper for the course \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, I will not be involved in any kind of **cheating/copying/plagiarizing** in solving the short questions-based paper of Final Term Examination Fall 2020. I take full responsibility of my conduct and if I found involved in any kind of such activity of cheating/copying/plagiarizing, then Institute reserves the right to reject my paper and take any disciplinary action against me.

Student Signature

** Final Exam / Fall 2020 (Paper Duration 24 hours)**

**(Online Assignment Based Question Paper)**

Course No.: CS-323   Course Title: Programming Fundamentals

Total Marks: 30 Date of Exams:

Degree: BSCS/BSIT Semester: 1st Section: (A &B)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q.No.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Marks  Obtained/  Total Marks |
| **Marks**  **Obtained** |  |  |  |  |  |  |  |  |  |  |  |

|  |
| --- |
| **Total Marks in Words:** |
| **Name of the Teacher: Mr. Irfan Ahmad** |
| **Who taught the course: Signature of Teacher / Examiner:** |

**To be filled by Student**

**Registration No.: Name:**

**(THEORETICAL EXAMINATION)**

**Answer the following questions.**

Q.No.1. Write a program that display the following output **(7)**

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

1 2 3 4

1 2 3

1 2

1

Answer:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q.No.2 Write a program that calculates the sum of the following series using function. The main ( ) function inputs a number and passes it to a function. The function finds the sum from 1 to given number and returns the sum to main ( ) function. **(7)**

**1 + 1/1! + 2/2! + 3/3! + ……. + n/n!**

Answer:

Q.No.3. Write a program that store ten values in an array and find and display sum of even values and product of odd values. Also counts all even numbers and odd numbers entered by the user? The program finally displays total numbers of evens and odds in array. **(7)**

Answer: \_\_\_\_\_\_

Q.No.4. Write a program that stores ten values in an array. It sorts the array in descending order using selection sort. It also displays the values of unsorted and sorted array. **(5)**

Answer:

Q.No.5. Write a program that inputs the salary of an employee from the user. It deducts the provident fund from the salary on the following basis: **(4)**

* 35% if the salary is above 50000.
* 30% if the salary is between 40000 and 50000.
* 25% if the salary is less than 40000.

The program finally displays salary, provident fund and net salary.

Answer: