ELECTRONICS & COMMUNICATION ENGINEERING DEPARTMENT NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA

SESSIONAL-I

BASICS OF PROGRAMMING (CSIR-11) SECTION: EC-A, EC-B, EC-C

Max. Marks: 15
Time: 50 mins

Note: Attempt any 3 Questions.

The candidate before starting the exam, please check the question paper for any discrepancy.

1. (a) What will be the output of the following program:

[2.5]

```
#include<stdio.h>
                                                         #include<stdio.h>
                                                 (ii)
    (i)
#include<conio.h>
                                            void main()
void main()
                                                     char k=5;
        float num=1.5;
                                                     clrscr();
                                                     switch(k)
        switch(num)
                case 1: printf("1");
                                                             default: printf("last\n");
                case 2: printf("2");
                                                             case 4: break;
                default: printf("0");
                                                                      printf("one\n");
                                                             case 2: printf("two\n");
        getch();
                                                                      break;
}
                                                     }
                                                     getch();
```

- (b) Explain with example: (i) Arithmetic Assignment Operators (ii) Logical Operators. [2.5]
- **2.** (a) Briefly explain the difference between Compiler and Interpreter. [3]
- (b) What is difference between while and do-while statement. [2]
- 3. Write a menu-driven program that takes an integer value. If 1 is entered, find the factorial of any number, if 2 is entered, calculate the sum of first n natural numbers using while loop and if 3 is entered, check whether the number is prime or not. [5]
- **4.** Write a Program to create an array, and compute the Mean, variance and Standard deviation. [5]