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Roll No. 2K19/B1/65

FIRST SEMESTER **B.Tech.(B Group)**

MID SEMESTER EXAMINATION **September-2019**

CO-101 Programming Fundamentals

40

Time: 1:30 Hours *Max. Marks: 30*

Note: Answer all five questions. All questions carry equal marks.
Assume suitable missing data, if any.
Give suitable examples wherever applicable

Q1 (a) Draw flow chart to find the sum of the all prime numbers between 235 and 335. What are the characteristics of a good algorithm? 3

(b) What is the relationship between formal arguments and actual arguments? How they can be declared within a function? Give relevant code. 3

(c) Explain tokens in C. main belongs to which token? 2

Q2. (a) What will be the output of the following, justify your answer 2

```
Void main()
{int i=5, j= 6, z
printf("%d", i+++j);
}
```

(b) Write a program in C to get a number from user and to 6
(i) write in words (ii) check for Armstrong (Number equal to sum of the cubes of its digits)
(iii) print reverse (iv) print sum of digits

Q3. (a) What is an operator? What are the different types of operators? What are the steps in solving any expression having different/multiple operators? Solve k = 5 > j > 2. What will be the value of k for j=2,3,4,5? Explain the reasons with steps. 5

(b) What is the relationship between formal arguments and actual arguments? How they can be declared within a function? Give suitable example. 3

WAP to find sum of n terms of fibonacci series

Q4. (a) Write the guidelines, explain the syntax with examples to use printf() function in C language. What is the output of the following printf("%6.3f. %13.4f, %-8.6g %7.2e",x,x,x,x) where x = 43.2345 5

(b) convert (show steps used for conversion) 3

(i) (213)10 = (.)8 = (.)16. = (.)2

(ii) (AA)16 = (.)10. = (.)8. =. (.)2.

Q4. (a) Write a C program that accepts n numbers from user, prints square of each number except when input is 5 and exit when entered 0 by the user. 3

(b) explain syntax of switch statement 1

(c) Write short notes 4

(i) static

(ii) Recursion