(Please write your Exam Roll No.) Exam Roll No. 01514202018

END TERM EXAMINATION

FIRST SEMESTER [BCA] NOVEMBER-DECEMBER 2018

Paper Code: BCA-105 *Subject: Introduction to Programming Language using C*

Time: 3 Hours *Maximum Marks: 75*

Note: Attempt any five questions including Q.no.1 which is compulsory. Select one question from each unit.

Q1 Write short notes of the following (**Any Five**): **(5x5=25)**

(a) What you mean by pre-increment and post-increment operator? Example with an example.

(b) Differentiate between structure and union. Explain the use of "extern" keyword

(c) Explain the concept of pointer? Define the dynamic memory allocation and its various functions.

(d) Differentiate between static and register storage class in C language.

(e) What is a string? Write program for the concatenation of two strings.

(f) What are preprocessor directives? from which symbol do they start?

UNIT-I

Q2 (a) Explain while loop and do-while loop with an example. Elaborate Difference between them. **(4.5)**

(b) Write a program to find the largest number among the three numbers. **(8)**

Q3 (a) Explain the Switch statement, Break statement, and Continue statement with an example **(6)**

(b) Write a program to find the factorial of a number using recursion. **(6.5)**

UNIT-II

Q4 (a) What do you mean by pointer? How pointer variables are initialized? Write a note on pointer arithmetic with a proper example in C language. **(6.5)**

(b) Write a program to find the out maximum number in array using pointer. **(6)**

Q5 (a) Explain the array of pointers to functions with suitable example. **(4.5)**

(b) Write the difference between call by value and call by reference with suitable example. **(8)**

UNIT-III

Q6 (a) Explain the concept of structure. Write a C program to stores the information (name, roll, Branch, dept., and marks) of 10 students using structures. Find who has topped in the class. **(12.5)**

Q7 Write a short note on each. **(12.5)**

(i) How to pass a structure to a function? (ii) Bit fields

(iii) Automatic storage classes (iv) File handling

UNIT-IV

Q8 (a) Write a program to compare two strings where they are identical or not. **(4.5)**

(b) Explain the following inbuild functions. **(8)**

(i) Strlen() (ii) Strcat() (iii) Striwr() (iv) Strupr()

Q9 (a) Write a Program to find the largest and smallest word in a string. **(4.5)**

(b) Explain the following header files. **(8)**

(i) Stdlib.h (ii) Ctype.h (iii) Math.h (iv) Process.h

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P.T.O.