

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) Automatic storage classes
 - (iii) Bit fields
 - (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 inbuilt functions. (8)
- (i) Strlen() (ii) Strcat() (iii) Strlwr() (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

