

END SEMESTER EXAMINATION, JUNE - 2019**BCA SECOND SEMESTER****COURSE CODE:BCA108****COURSE TITLE: ADVANCED CONCEPTS OF C PROGRAMMING****[Time allotted: Three hours]****[Max. Marks: 100]***Note: Attempt all Sections & Questions.***Section (A)****Q.1. Attempt all questions.****(2 x 10 = 20)**

- a. What is the difference between function prototype, function definition, function call?
- b. What will be the possible output when we compare two string with case sensitive?
- c. What are different modes for opening a file?
- d. What is a preprocessor?
- e. Name some of the bitwise operators with their syntax?
- f. The scanf() function can be used to read only one value at a time (T/F).
- g. What is the function for inputting a single character value in file handling?
- h. The operator is used for dereferencing the pointer.
- i. what will be the output of the following statements
int a=13,b=2; a<<=b; printf("%d",a);
- j. How to write multiple line comment in C?

Section (B)**Q.2. Attempt any 5 questions.****(7 x 5 = 35)**

- a. What is a string? Write a program to concatenate two strings.
- b. Explain structure and array with example? And also define pointer to structure and pointer to an array with example.
- c. Write a program to perform addition without using addition operator.
- d. Write a program to print the factorial of any number using recursion..
- e. Write a program for sorting an array in descending order.
- f. Write a program for printing smallest element form an array elements with the help of pointer only.
- g. WAP for creating a three files named as DATA, EVEN, ODD. DATA file contains a series of integer numbers then read this file and write all even numbers to EVEN file and all odd numbers into ODD file using file handling.

Section (C)**Attempt any 3 questions.****(15 x 3 = 45)****Q.3. Write the program for the following:****(5*3)**

- a. Armstrong number b. Palindrome number c. Amicable numbers

Q.4. a. Write a program to perform addition of two matrices.**(8)****b. What do you understand by data types? Discuss the hierarchy of data types. Explain each with their syntax.****(7)****Q.5. a. Write a program to print the sum of an array using pointers.****(7)****b. Write a program to read the text file and count the number of characters present in the file.****(8)****Q.6. a. What is the difference between built-in and user-defined functions? Write a program to perform swapping of two numbers.****(7)****b. Write a program to input information about *n* students in a class given the following:****(8)**

Roll no, student name, total marks

The program should output the detail of student.

Q.7. a. Write a program to implement linear search.**(8)****b. What are different bitwise operators? Explain each with suitable example.****(7)**
