Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐☐

Question Paper Code : 90150

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2019

Second Semester

Computer Science and Engineering

CS 8251 – PROGRAMMING IN C

(Common to Computer and Communication Engineering/Information Technology)

(Regulations 2017)

Time : Three Hours   Maximum : 100 Marks

Answer ALL questions

PART – A   (10×2=20 Marks)

1. Differentiate break and continue statement in C programming language.

2. List the various types of C operators.

3. Name any two library functions used for string handling.

4. Given an array int a [10] = {101, 012, 103, 104, 105, 106, 107, 108, 109, 110}. Show the memory representation and calculate its length.

5. What are the steps in writing a function in a program ?

6. Is it better to use a macro or a function ?

7. What is register storage in storage class ?

8. Write the syntax for pointers to structure.

9. What are two main ways a file can be organized ?

10. List the File Operations in C paradigm.

PART – B   (5×16=80 Marks)

11. a) i) Describe the structure of a C program with an example.   (8)
       ii) Explain the various operators used in C.   (8)

                              (OR)

    b) Explain about the various decision making and branching statements in C programming language.

12. a) i) Describe the following with respect to arrays :- need of an array, declaration of array and accessing an array element. (8)

    ii) Explain in algorithm and write a C program to re-order a one-dimensional array of numbers in descending order. (8)

(OR)

b) Write a C program to find the transpose of a matrix.

13. a) i) Discuss on recursive function . Write a C program to find factorial of n using recursion. (8)

    ii) Write a C program to reverse a string using recursion. (8)

(OR)

b) Explain the concept of pass by value and pass by reference with suitable example in C programming language.

14. a) Write a C program using structures to prepare the students mark statement. The number of records is created based on the user input.

(OR)

b) Write a C program using structures to prepare the employee pay roll of a company. The number of records is created based on the user input.

15. a) Explain in detail about command line arguments with an example of generating Fibonacci series of a number in C programming language.

(OR)

b) i) Write short notes on File functions in C,

      1. fseek()

      2. ftell()

      3. rewind()

      4. feof()

      5. fscanf().

    ii) Discuss about the modes of file handling.