C.S.J.M. University, Kanpur - 2018

C-PROGRAMMING (BCA 106)

Section-A (Short Answer Type Questions)

Note: All questions are compulsory. Each question carries 3 marks.

1. (A) What are subscripts ? How are they written? What restrictions apply to the values that can be assigned to the subscripts?

(B) Suppose a function declaration includes agrument type specification and one of the arguments is an array. How must the array type specification be written? Use small example for reference.

(C) Describe two different methods for creating a stream-oritented data file. Can both methods be used with unformatted date files?

(D) What is meant by opening a data file? How is this accomplished?

(E) Can a structure variable be defined as a member of another structure? Can an array be included as a member of a structure? Can an array have structures as elements? If yes, then place suitable block codes for respectively.

(F) What is the purpose of the 'Typedf' feature? How is the feature used in conjunction with structures?

(G) How is a pointer variable declared? What is the purpose of the data type included in the declaration? In what way can assignment of an initial value be included in the declaration of a pointer variable?

(H) How can a function return pointer to its calling routine?

(I) What is preprocessor directive? Differentiate conditional and define directives.

Section-B

(Long Answer type Questions)

Note: Attempt any two questions. Each question carries 12 marks.

2. Write a C program that will generate a table of values for the equation:

$$y = 2^{x-0.1x} \sin(0.5t)$$

Where / varies between 0 and 60. Allow the size of the increment to be entered as an input parameter.