

Paper ID [B0204]

(Please fill this Paper ID in OMR Sheet)

BCA (Sem. - 1st) PROGRAMMING IN 'C' (BC - 104)

Time : 03 Hours

Maximum Marks : 60

Instruction to Candidates:

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Four** questions from Section - B.

Section - A

Q1)

(10 × 2 = 20)

- a) What is the role of modulus operator in C? Does it work for floating-point numbers?
- b) Differentiate between break and continue statement.
- c) What are the various built-in data types in C?
- d) What is a dangling pointer?
- e) What is significance of **calloc** function in C?
- f) What are the different ways to declare a structure variable?
- g) What are different modes in which a file can be opened?
- h) What do you understand by complexity?
- i) Can time delay be generated in C through loops? If yes, how?
- j) What are limitations of union?

Section - B

(4 × 10 = 40)

Q2) Write short note on :

- (a) File handling (b) Pointer Arithmetic

Q3) Write a program to multiply two 2-D matrices.

Q4) Explain nesting of structures with example. Also state differences between structure and union.

Q5) Compare recursion with iteration. Also write a recursive program to find LCM of two numbers.

Q6) Write the algorithm and program for any searching technique.

Q7) Discuss in detail with examples differences between all the four storage classes.

