Roll No. ....

Total No. of Questions : 13]   [Total No. of Pages : 02

Paper ID [A0204]

(Please fill this Paper ID in OMR Sheet)

BCA (104) (Old) (Sem. - 1ˢᵗ)

PROGRAMMING IN C

Time : 03 Hours   Maximum Marks : 75

Instruction to Candidates:

1) Section - A is **Compulsory**.

2) Attempt any **Nine** questions from Section - B.

Section - A

Q1)   *(15 × 2 = 30)*

a) What are the naming rules of variables?

b) What is the working principle of pre-fix operators?

c) Differentiate between "gets" and "puts" function.

d) What are symbolic constants?

e) What is the role of library function?

f) What are the limitations of **goto** statement?

g) Differentiate between **switch** and **if-else** statements.

h) What is recursion?

i) Is prototyping mandatory in C? Justify your answer.

j) List applications of arrays.

k) Differentiate between structures and unions.

l) What are different modes in which a file can be opened?

m) In what all situations structures are preferred.

n) What is complexity?

o) What are the advantages of data files?

Section - B

(9 × 5 = 45)

Q2) Explain basic data types available in C with the help of example.

Q3) Discuss the various operators available in C with the help of example.

Q4) Explain briefly various character input/output functions with examples.

Q5) What are constants? Discuss their types with examples.

Q6) Differentiate between various loops available in C language.

Q7) Write a program in C to add two 2-D arrays.

Q8) Explain differences between call by value and call by reference techniques of parameter passing.

Q9) Write a program using recursion to create a table of any number.

Q10) Explain nesting of structures with example.

Q11) Write a program to create a file and display its contents. Assume suitable data.

Q12) Discuss the algorithm for any searching technique.

Q13) Write a program for any sorting technique.

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