

Roll No.

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MCA (Sem. – 1st)

PROGRAMMING IN C

SUBJECT CODE : MCA – 102 (N2)

Paper ID : [B0102]

Time : 03 Hours

Maximum Marks : 60

Instruction to Candidates:

- 1) Attempt any one question from each Sections - A , B, C & D.
- 2) Section E is **Compulsory**.
- 3) Use of Non-programmable **Scientific Calculator** is allowed.

Section – A

(1 × 10 = 10)

Q1) What are various conditional statements? Explain the difference between nested if and switch case statement by taking suitable examples.

Q2) Write note on the following:-

- a) Symbolic constants. b) C Tokens. c) Role of data types in 'C' language

Section – B

(1 × 10 = 10)

Q3) What is multidimensional array? Write a 'C' language program to find transpose of given matrix by using the concept of functions.

Q4) What are header files? What is need of header files in 'C' programming? Explain the role of preprocessor directives in 'C' programming by taking suitable example.

Section – C

(1 × 10 = 10)

Q5) What is call by value? How it is different from call by reference? Write and explain 'C' language program to implement the concept of call by value and call by reference.

Q6) What is enumeration? What are its advantages? Write a 'C' language program to explain the concept of enumeration.

Section – D

(1 × 10 = 10)

Q7) What is file? Explain various function used for opening, closing and processing a file in 'C' language.

Q8) Binary search? Write a 'C'

language program to implement the concept of binary search.

Section – E

(10 × 2 = 20)

Q9) a) What is an algorithm? List its characteristics.

b) Draw and explain flowchart for finding largest number out of three given numbers.

c) What is data type? Explain the difference between "int" and 'long int'.

d) Explain how 'while' statement is different from 'do while' statement.

e) Write a 'C' language program to find

f) What are storage classes? Explain.

g) What is pointer to pointer? Explain with example.

h) Why pointer is used in 'C' programming?

i) What is structure? How it is different from union?

j) What is sorting? Explain the concept of bubble sort.

