

11. What is a Macro ? Summarize the similarities and differences between macros and function.
12. What do you mean dynamic memory allocation ?
How is it useful ?
13. Write a program to read your name, roll number and percentage from the keyboard and then write it to a file.

MCA-03

December – Examination 2022

MCA Examination

Computer Programming Using ‘C’

Paper : MCA-03

Time : 3 Hours]

[Maximum Marks : 80

Note :- The question paper is divided into three Sections A, B and C. Write answers as per the given instructions.

Section-A

8×2=16

(Very Short Answer Type Questions)

Note :- Answer all questions. As per the nature of the question delimit your answer in one word, one sentence or maximum up to **30** words. Each question carries 2 marks.

1. (i) What are a source program and an object program ?

- (ii) Write down the main purpose of the scanf() and printf() functions.
- (iii) Give the three logical operators included in C.
- (iv) What do you mean by the scope of a variable ?
- (v) State three advantages to the use of functions.
- (vi) What is the header file for string library function ?
- (vii) How is a structure declared ?
- (viii) Write the name of two input functions for the file.

Section-B **4×8=32**

(Short Answer Type Questions)

Note :- Answer any *four* questions. Each answer should not exceed **200** words. Each question carries 8 marks.

- 2. What is an algorithm ? Why is it necessary to write an algorithm before program coding ?
- 3. What is an operator ? What are the different types of operators that are included in C ?

- 4. What is the purpose of the do-while statement ? How does it differ from the while statement ? What is the minimum number of times that a do-while loop can be executed ?
- 5. How many types of storage class exist ? Explain the storage class of a variable ?
- 6. What are arguments ? Explain the relationship between formal and actual argument.
- 7. How are one dimensional array and two dimensional arrays represented using pointers ?
- 8. How are the data elements of a structure accessed and processed ?
- 9. Mention the various modes used with the fopen() functions.

Section-C **2×16=32**

(Long Answer Type Questions)

Note :- Answer any *two* questions. You have to delimit your each answer maximum up to **500** words. Each question carries 16 marks.

- 10. Explain with an example the similarity and difference between break and continue statements.