

2018

MCA 1st Semester Examination

PROGRAMMING LAB.

PAPER—MCA-192

(Practical)

Full Marks : 100

Time : 3 Hours

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer any *two* questions (Lottery basis). 2×35

1. Write a program in C to sort a set of numbers using bubble sort.
2. Write a program in C to find the factorial of a given number using recursion.
3. Write a program in C to solve a quadratic equation taken as an input.

(Turn Over)

4. Write a program in C to implement a doubly linked list.
5. Write a program in C to calculate GCD of two given numbers using recursion.
6. Write a program in C to convert a given decimal number to its binary equivalent.
7. Write a program in C to reverse a string without using any built-in string function.
8. Write a program in C to find the largest word in a given line.
9. Write a program in C to transpose a matrix taken from the user.
10. Write a program in C to copy the content of one file to another file.
11. Write a program in C to sort a given set of numbers using selection sort.
12. Write a program in C to swap two given numbers using a function.
13. Write a program in C to search a number from a sorted array using binary search.

14. Write a program in C to get the substring of a string using a function.
15. Write a program in C to check whether a given number is a prime or not using recursion.
16. Write a program in C to concatenate two given string without using any built-in string function.
17. Write a program in C to sort a given set of numbers using insertion sort.
18. Write a program in C to read some student records using a structure array and then display the records.
19. Write a program in C to multiply two matrices taken as an input from the user.
20. Write a program in C to print the maximum of two given numbers using a macro.
21. Write a program in C to reverse the first n characters of a given string then print the string.

22. Write a program in C to calculate the sum of the following series :

$$1 + \frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \dots$$

23. Write a program in C to replace a substring with another string in a given string of text.
24. Write a program in C to merge two files into a third file.

Practical Note Book : 10

Viva-Voce : 20
