K23U 1983

Reg. No. : .....

Name : .....

II Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/ Improvement) Examination, April 2023

(2019 Admission Onwards)

CORE COURSE IN COMPUTER SCIENCE

2B02CSC : Advanced C Programming

Time : 3 Hours

Max. Marks : 40

PART – A

Short answer. Answer **all** questions.

1. Define modular programming.
2. How can you skip a part of loop ?
3. What is a static variable ?
4. What is Library Functions ? Give example.
5. Explain printf() and scanf() statements in C.
6. What is dynamic memory allocation ?

(6×1=6)

PART – B

Short Essay. Answer **any 6** questions.

7. Explain the execution of a function.
8. What is a macro ? Give example.
9. What are automatic variables ?
10. How a matrix can be declared in C ?
11. What is meant by recursion ?
12. What is meant by call-by-reference ?
13. What is a null pointer ?
14. Differentiate structure and union.

(6×2=12)

P.T.O.

PART – C

Essay. Answer **any 4** questions.

15. Differentiate between local and global variables with examples.

16. What are preprocessor directives ? Explain with example.

17. What is prototyping ? Why is it necessary ?

18. State the difference between malloc() and calloc().

19. What are the various modes of opening a file in C ?

20. Write a C program to find the number of vowels in a string. **(4×3=12)**

PART – D

Long Essay. Answer **any 2** questions.

21. List and discuss the different storage class specifications in C language.

22. Define an array and develop a C program to sort an array of N numbers in ascending order.

23. Write C program to search a number in an array and display its position.

24. Write a C program to pass an array of integers to a function and find its sum of elements. **(2×5=10)**