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## 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?

 $(6 \times 1 = 6)$ 

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)



## 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.  $(4\times3=12)$

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)

TOUR UNIVER