2023/FYUG/ODD/SEM/
CSCSEC-101T/071

FYUG Odd Semester Exam., 2023
(Held in 2024)

COMPUTER SCIENCE

(1st Semester)

Course No. : CSCSEC-101T

(Programming with C)

Full Marks : 50
Pass Marks : 20

Time : 2 hours

The figures in the margin indicate full marks for the questions

SECTION—A

Answer *fifteen* questions, selecting any *three* from each Unit : 1×15=15

UNIT—I

1. What is data type in C?
2. Define character constant.
3. What is token in C?
4. What are logical operators?

UNIT—II

5. What is function in C?

6. What do you mean by function prototype declaration?

7. What is pointer?

8. What is header file in C?

UNIT—III

9. What is 1D array?

10. Define 2D array.

11. What is command line argument?

12. What is address of operator?

UNIT—IV

13. What is structure?

14. What is structure variable?

15. What is 'typedef'?

16. What is the purpose of dot (·) operator?

(Continued)

UNIT—V

17. What do you mean by formatted input/ output statement?

18. Write down the purpose of fopen( ) function.

19. What is macro in C language?

20. What is 'enum'?

SECTION—B

Answer *five* questions, selecting *one* from each Unit : 2×5=10

UNIT—I

21. What is the difference between break statement and exit( )?

22. What do you mean by infinite loop? Give example.

UNIT—II

23. What is function call? Explain with example.

24. Write down the difference between actual argument and formal argument.

UNIT—III

25. How are 2D arrays declared and initialized?

26. What do you mean by pointer-to-pointer? Give example.

UNIT—IV

27. Write down the difference between structure and union.

28. What do you mean by self-referential structure? Give example.

UNIT—V

29. What are the primary advantages in using a data file?

30. What are the similarities and differences between macro and function?

SECTION—C

Answer *five* questions, selecting *one* from each Unit : 5×5=25

UNIT—I

31. Explain the different looping structures used in C language.

32. Write a C program to generate Fibonacci sequence.

UNIT—II

33. What is recursion? Write a C program to calculate factorial *n* using recursion. 1+4=5

34. Explain different storage class specifiers used in C language.

UNIT—III

35. Write a C program to find the minimum and maximum of an *n*-element array.

36. Write short notes on the following : 2½+2½=5

(a) Call by value

(b) Call by reference

UNIT—IV

37. Write a C program using structure to input information (Name, Roll Number, Department and Semester) about *n* numbers of students and to display them.

38. How can we pass structures to a function? Explain with suitable example.

UNIT—V

39. Explain the following file opening modes :

(i) 'w'

(ii) 'a'

(iii) 'r+'

(iv) 'w+'

(v) 'a+'

40. Write a program to take the contents of a file and copy them into another file, character-by-character.

★★★

http://www.elearninginfo.in