

FOUR YEAR B.Sc. HONOURS DEGREE EXAMINATION, JUNE/JULY -2024

CHOICE BASED CREDIT SYSTEM

SECOND SEMESTER-MAJOR

PART-II: COMPUTER SCIENCE

PAPER-3: PROBLEM SOLVING USING C

(Under CBCS New Regulation w.e.f the academic year 2023-24)

Time : 3 Hours

Max. Marks : 75

SECTION -A

Answer any Five of the following questions. Each question carries equal marks.

(5×5=25)

1. Define flowchart. Illustrate with example.
2. Discuss the structure of-C program.
3. Differentiate between while and do-while.
4. Illustrate about switch statement.
5. Discuss about two-dimensional array declaration and initialization.
6. Write a C program to the number of elements in an array.
7. Discuss the concept of recursion.
8. Discuss about storage classes.
9. Differentiate between structures and unions.
10. Illustrate writing data to files in file handling functions.

SECTION - B

Answer All questions. Each question carries equal marks.

(5×10=50)

11. a) Illustrate the different types of programming languages.

(OR)

- b) Illustrate the various operators in C.

12. a) Illustrate the following
- i) If statement
 - ii) If-else statement and
 - iii) Else-if ladder.

(OR)

- b) Explain the various jumping statements with example.

13. a) Define array. Illustrate one-dimensional arrays.

(OR)

- b) Define a string. Explain the various string handling functions.

14. a) Illustrate call by value and call by reference.

(OR)

- b) Explain about dynamic memory allocation.

15. a) Define structure. Illustrate the concept of structures.

(OR)

- b) Illustrate the different file operations.
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**FOUR YEAR B.C.A. HONOURS (DATA SCIENCE/ARTIFICIAL
INTELLIGENCE/BIG DATA/CLOUD COMPUTING/GENERAL)
DEGREE EXAMINATION**

JUNE/JULY-2024

CHOICE BASED CREDIT SYSTEM

SECOND SEMESTER - MAJOR

PART-II

PAPER-4: PROGRAMMING IN C

(Under CBCS New Regulation w.e.f the academic year 2023-24)

Time : 3 Hours

Max. Marks : 75

SECTION - A

Answer any Five of the following questions. Each question carries equal marks.

(5×3=15)

1. What are the key features of algorithms?
2. What are variables, and how are they declared and used in C?
3. What is an array in programming, and why is it used?
4. What is a function in programming?
5. What is a Pointer?
6. What is an array of structures?
7. What are structures and unions in C programming?
8. What are common operations performed on arrays?
9. What are tokens in programming, and why are they important?
10. Define flowcharts and their significance in algorithm design.

SECTION - B

Answer any Five of the following questions. Each question carries equal marks.

(5×12=60)

11. Discuss the features of the C programming language.
12. Explain the process of compiling and executing C programs.

13. Explain the syntax and usage of if, if-else, and nested if-else statements in C programming.
 14. Discuss in detail about the iterative statements (loops) in C.
 15. Explain in detail about the syntax for declaring arrays in C programming.
 16. Explain various methods for accessing elements of an array.
 17. Explain the concept of recursion in programming.
 18. What is the difference between local variables, global variables in C?
 19. Explain the concept of enumerated data types in C programming.
 20. Define a union in C programming and explain how it differs from a structure.
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THREE YEAR B.Sc. (CBCS) DEGREE EXAMINATION — OCTOBER/NOVEMBER 2020
SECOND SEMESTER

3-2-120

Part - II : Computer Science

Paper I : OBJECT ORIENTED PROGRAMMING WITH C++

(New syllabus w.e.f 2016-2017)

Time : 3 hours

Max. Marks : 75

PART - A

Answer any FIVE questions.

(Marks : $5 \times 5 = 25$)

1. (a) Differentiate between procedure oriented programming and the object oriented programming?
- (b) What are manipulators?
- (c) What are derived data types?
- (d) What are access specifiers?
- (e) Write about the creating array of objects.
- (f) What are Inline functions?
- (g) What is function overloading?
- (h) Discuss about methods overriding
- (i) Write a short note on error handling in C++
- (j) Write about virtual functions

PART - B

Answer ONE question from each Unit.

All question carries equal marks.

(Marks : $5 \times 10 = 50$)

UNIT - I

2. Explain about programming language generations?

Or

3. Explain about object oriented paradigm?

[P.T.O.]

UNIT - II

4. Explain about the tokens in C++.

Or

5. (a) Explain about default arguments
(b) Explain about friend functions in C++

UNIT - III

6. Explain about static data members and static member functions.

Or

7. What is constructor? Explain different type of constructors in C++.

UNIT - IV

8. Explain about operator overloading and explain about overloading unary binary operations.

Or

9. What is inheritance? Explain different types of inheritances.

UNIT - V

10. Explain about unformatted I/O operations?

Or

11. (a) Explain about file functions,
(b) Explain about command line arguments
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