



2019/TDC/ODD/SEM/CSCHCC-101T/180

TDC (CBCS) Odd Semester Exam., 2019

COMPUTER SCIENCE

(1st Semester)

Course No. : CSCHCC-101T

(Programming Fundamentals Using C/C++)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

Answer **all** questions

UNIT—I

1. Answer any *two* questions from the following : 2×2=4

(a) Explain keyword with example.

(b) Write down the purpose of '::' operator.

(c) What is type casting? Why is it necessary? Give example.



2. (a) Write a C++ program to calculate Fibonacci sequence. 4

(b) What is switch-case statement? Give its syntax. 2

OR

3. (a) Mention the difference between object-oriented and procedure-oriented programming. 3

(b) Explain with example different conditional statements in C/C++. 3

UNIT—II

4. Answer any two questions from the following : 2×2=4

(a) What do you mean by function prototype? Explain with example.

(b) Write down the difference between structure and union.

(c) Define recursion with example.

5. Write short notes on the following : 2+1+1+2=6

(a) Actual argument and formal argument

(b) Calling function

(c) Return statement

(d) Inline function

OR

6. (a) Write a C++ program to find maximum and minimum of an array. 4

(b) How are strings represented in C++? Give example. 2

UNIT—III

7. Answer any two from the following questions : 2×2=4

(a) Write down the advantages of using pointer.

(b) Write down difference between malloc() and calloc().

(c) What is macro? Give example.

8. (a) What is the relationship between array name and pointer? How is a pointer variable declared? 3



(b) Write a C++ program using pointer to read a line of text and then counts the total number of vowels and consonant in it.

3

OR

9. (a) What are different file mode parameters used in open()?

3

(b) Write down the purpose of read() and write() along with syntax.

3

UNIT-IV

10. Answer any two questions from the following : $2 \times 2 = 4$

(a) What are static binding and dynamic binding?

(b) What is the difference between private and protected access rights?

(c) What is default argument? Explain with example.

11. (a) What is object? How can objects be declared? Also write down the syntax of accessing class members.

3

(b) How can you return objects using function? Demonstrate with an example.

3

OR

12. What are default constructor, parameterized constructor and copy constructor? Demonstrate each with an example.

6

UNIT-V

13. Answer any two from the following questions : $2 \times 2 = 4$

(a) What is polymorphism? What are the different types of polymorphism?

(b) What is pure virtual function? Give example.

(c) How are exceptions handled in C++?

14. (a) What is the purpose of operator overloading in C++?

2

(b) Demonstrate with an example how unary operators can be overloaded. Take unary minus (-) as an example.

4

OR

15. (a) How can inheritance be done in C++? Explain with different methods.

4

(b) What is virtual base class?

2
