

TDC Odd Semester Exam., 2020  
held in July, 2021

COMPUTER SCIENCE

( Honours )

( 3rd Semester )

Course No. : BCSH-302

( Object-oriented Programming in C++ )

Full Marks : 35

Pass Marks : 12

Time : 2 hours

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

Answer **five** questions, taking **one** from each Unit

UNIT—I

1. What do you mean by inheritance? Write a program to explain the concept of multiple inheritance. 2+5=7
2. Write a program that can explain the following statement : 7  
“Encapsulation, polymorphism and class abstraction work together.”

UNIT—II

3. (a) What is the difference between ‘While’ and ‘Do-while’? Explain with a program. 5  
(b) What is the need of token? Explain. 2
4. (a) What is the difference between ‘array’ and ‘structure’? 2  
(b) Write a program to implement ‘delete’ operation at a specified location in the array elements by using painter. 5

UNIT—III

5. Describe the following terms : 2+2+3=7  
(a) Inline function  
(b) Friend function  
(c) Virtual function
6. What do you mean by constructor? How can we use constructor as a polymorphism? Explain with a suitable code. 2+5=7

UNIT—IV

7. Write a program to explain the concept of ‘binary’ operator overloading and also explain the flow of control during the execution of program. 7

( 3 )

8. Describe the statements how we can convert—

(a) integer to float;

(b) float to integer;

(c) char to integer;

(d) char to string;

(e) double to integer.  $1+1\frac{1}{2}+1\frac{1}{2}+1\frac{1}{2}+1\frac{1}{2}=7$

UNIT—V

9. What do you mean by exception handling?

Write a program to handle the error that is generated by array out of bounds.  $2+5=7$

10. Explain the following terms :  $3+4=7$

(a) Templates

(b) C++ I/O system basics and exception handling

★ ★ ★