

TDC (CBCS) Even Semester Exam., 2019

COMPUTER APPLICATION

( 2nd Semester )

Course No. : BCACC-201T

( Introduction to Programming )

Full Marks : 50

Pass Marks : 20

Time : 3 hours

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

UNIT—I

1. Answer any *three* questions from the following : 1×3=3
- (a) What is the meaning of 'int main(void)'?
  - (b) What are scope of variables?
  - (c) Why are header files necessary in C++ program?
  - (d) Write down the purpose of getchar( ).

2. (a) Differentiate between procedural programming and object-oriented programming. 3
- (b) Define type casting with a simple program. 4

OR

3. (a) What is keyword? Write down the purpose of any six keywords. 1+3=4
- (b) Briefly define different types of variables and constants in C++. 3

UNIT—II

4. Answer any *three* questions from the following : 1×3=3
- (a) What is the difference between '++' operator and '+'?
  - (b) 'a 5 10?3:4', what will be the value of a?
  - (c) Write down the difference between break and exit( ).
  - (d) Write down one difference between while and do-while.

( 3 )

5. (a) Write a C++ program to calculate factorial of  $n$ . 4  
(b) What is conditional construct? Explain with example. 3

OR

6. (a) What is infinite loop? How can a program exit from an infinite loop? Give example. 3  
(b) Explain with example—switch-case statement. 4

UNIT—III

7. Answer any *three* questions from the following :  $1 \times 3 = 3$   
(a) What is the purpose of inline function?  
(b) What are the actual and formal arguments?  
(c) Write down the purpose of `strcat()` function.  
(d) What is function prototype declaration?
8. (a) Write a C++ program to read a number of elements and find the average of these numbers. 4  
(b) How can 2D arrays be declared and initialized? Give example. 3

J9/2128

( Turn Over )

( 4 )

OR

9. (a) What are call by value and call by reference? Give example. 4  
(b) How are strings represented in C++? Give example. 3

UNIT—IV

10. Answer any *three* questions from the following :  $1 \times 3 = 3$   
(a) What is structure variable?  
(b) Write down the purpose of period operator.  
(c) What is macro?  
(d) Write down the purpose of 'fstream' class.
11. (a) Differentiate between structure and union. 3  
(b) What is structure array? How can we access the structure array? Explain with example.  $1 + 3 = 4$

J9/2128

( Continued )

( 5 )

OR

12. (a) What are different file mode parameters? How are file mode parameters used in open()? Give syntax.  $2+2=4$
- (b) Explain different functions for manipulations of file pointers. 3

UNIT—V

13. Answer any *three* questions from the following :  $1 \times 3 = 3$
- (a) What is constructor?
- (b) What is friend function?
- (c) Write one difference between private and protected access modifier.
- (d) What is inheritance?
14. (a) Describe the mechanism of accessing data members and member functions in the following cases : 4
- (i) Inside the main program
- (ii) Inside a member function of another class
- (b) What is the importance of parameterized constructors? Explain with a programming construct. 3

( 6 )

OR

15. (a) What is inheritance? Discuss its various forms. 4
- (b) How can we pass objects as function parameter? Explain with example. 3

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