

Roll No.

Total Pages : 4

BCA-301

B.C.A. (Third Year) Examination, 2019

OBJECT ORIENTED PROGRAMMING USING C++

Paper-I

Time Allowed : Three Hours

Maximum Marks : 100

PART-A

[Marks : 20

Answer all questions (50 words each).

All questions carry equal marks.

PART-B

[Marks : 50

Answer five questions (250 words each), selecting one question from each Unit. All questions carry equal marks.

PART-C

[Marks : 30

Answer any two questions (300 words each).

All questions carry equal marks.

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P. T. O.

PART-A

1. Answer the following questions :

- (i) What is Recursion function ?
- (ii) What do you mean by abstraction ?
- ~~(iii)~~ What is the difference between Class and Structure?
- ~~(iv)~~ What is Friend function ?
- 2017 ~~(v)~~ Discuss the significance of Derived Class.
- 2018 ~~(vi)~~ Differentiate between Static and Dynamic binding.
- 2017 ~~(vii)~~ How exceptions are different from errors ?
- 2018 ~~(viii)~~ Write the syntax of defining functions templates.
- ~~(ix)~~ What do you mean by Container ?
- 2017 ~~(x)~~ What are the different modes in which a file can be opened ?

PART-B

UNIT-I

- 2 2018 Compare Object Oriented Programming with procedure Oriented Programming.

- 2017 3. Explain the difference between Implicit and Explicit type conversion using example.

UNIT-II

- 2018
- new 4. [What is the Function Overloading] Write a program to implement Function Overloading ?
- new 5. [What is the Operator overloading] Explain Overloading binary operators.

UNIT-III

- 2017 6. Why the pure virtual function are used in C++ ? Is one can create objects of abstract class ?
- 2018
7. Define the Polymorphism? What are the types of Polymorphism ?

UNIT-IV

8. What is the user defined exception ? How are caught and throw using try-catch block of C++ ?
- 2018 9. Explain the benefits of exception handling.

UNIT-V

- 2018 10. What is the difference between processing of sequential and random files ?

(2 marks)

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P. T. O.

11. Explain the importance of using container classes.

neo

PART-C

12. (a) Discuss in detail the basic principles of Object
2018 Oriented Programming.

neo (b) What are the Reference variables ? How can they be declared and used in the program ?

13. (a) Define the Class. Describe different methods of
neo defining member functions for a class.

(b) Explain the different types of constructor giving
neo example of each.

14. Explain the concepts of Inheritance. Also explain
2017 various types of inheritance with example.

neo 15. Distinguish between exception and error. Describe the hierarchy of subclasses of exception related classes.

16. Write short notes on the following :

neo (a) Error handling during the operations.

2018 (b) Application of container classes.

2018 (c) Components of STL.