Reg. No. :

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

Third Semester

Information Technology

15UIT304 - OBJECT ORIENTED PROGRAMMING

(Regulation 2015)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. Which of the following concept is often expressed by the phrase, 'One interface, and multiple methods'?

    (a) Abstraction   (b) Polymorphism   (c) Inheritance   (d) Encapsulation

2. Which Keyword from the following is used to inherit properties from one class into another?

    (a) extends   (b) subclasses   (c) native   (d) all the above

3. Which of the following supports the concept of hierarchical classification?

    (a) Polymorphism   (b) Encapsulation   (c) Abstraction   (d) Inheritance

4. Which of the following is a mechanism by which object acquires the properties of another object?

    (a) Encapsulation   (b) Abstraction   (c) Inheritance   (d) Polymorphism

5. How will a class protect the code inside it?

    (a) Using Access specifier   (b) Abstraction
    (c) Use of Inheritance   (d) All the above

PART - B (5 x 3 = 15 Marks)

6. What are the operators available in C++?

7. Write some properties of friend functions.

8. Write some of the basic rules for virtual functions.

9. List out some of the error handling functions.

10. Write the syntax of creating a custom manipulator.

PART - C (5 x 16 = 80 Marks)

11. (a) Explain in detail about object oriented programming concepts.   (16)

Or

(b) (i) Explain about friend function with suitable example.   (8)

(ii) What is function overloading? Give an example.   (8)

12. (a) What is constructor? Explain the types of constructor with an example.   (16)

Or

(b) (i) Explain in detail about array of objects with example.   (8)

(ii) Explain in detail about pointer to member with example.   (8)

13.(a) Explain in detail about operator overloading with example.   (16)

Or

(b) (i) Write a program to implement dynamic polymorphism with example.   (8)

(ii) Write a program to implement type conversion with example.   (8)

14. (a) Write short notes on class template and function template.   (16)

Or

(b) (i) Write a program to implement pure virtual function with example.   (8)

(ii) Write a program to implement virtual destructor with example.   (8)

15. (a) Explain in detail about file handling with example program.   (16)

Or

(b) (i) Write a program to read from 2 files simultaneously.   (8)

(ii) Write a program to implement file exception handling with example.   (8)

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