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Question Paper Code: 43804

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2018

Third Semester

Information Technology

14UIT304 - OBJECT ORIENTED PROGRAMMING

(Common to Computer Science and Engineering)

(Regulation 2014)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

- Which of the following is correct about class and structure?
 - Class can have member functions while structure cannot
 - Class data members are public by default while that of structure are private
 - Pointer to structure or classes cannot be declared
 - Class data members are private by default while that of structure are public by Default.
- Which of the following are available only in the class hierarchy chain?
 - Public data members
 - Protected data members
 - Private data members
 - Member functions
- Which of the following operators cannot be overloaded?
 - +
 - <
 - ::
 - =
- Constructor is executed when
 - an object is created
 - an object is used
 - a class is declared
 - an object goes out of scope

- (b) (i) What is friend function? What is the use of using friend functions in c++? Explain with a program. (8)
- (ii) What are the relationships between outer and inner classes? Give an example. (8)
17. (a) (i) Explain '+' operator overloading with an example. (8)
- (ii) Explain type conversion with suitable example. (8)
- Or
- (b) What are the characteristics of constructor functions? Explain the various types of constructors and destructors. Illustrate with example program. (16)
18. (a) (i) What is a class template? Explain the syntax of a class template. Perform push and pop operation of a stack using class template. (10)
- (ii) Briefly explain uncaught exception with an example. (6)
- Or
- (b) Apply various mechanisms used in exception handling with suitable examples. (16)
19. (a) (i) Write a C++ program to calculate the square and cube of a given number using multilevel inheritance. (12)
- (ii) Give the rules for using virtual functions. (4)
- Or
- (b) Discuss the different types of inheritance supported in C++ with suitable illustration. (16)
20. (a) What are manipulators? Explain in detail about various manipulators used for Input Output operations with an example. (16)
- Or
- (b) (i) Write a program
- (1) To reverse a string (4)
- (2) Count the number of characters in the string (4)
- (ii) Write a C++ Program for writing and reading a file. (8)

