PA-1197

[5925]-219

S.E. (Electronics/E & TC/Electronics & Computer)
OBJECT ORIENTED PROGRAMMING (2019 Pattern) (Semester - IV) (204194)

Time : 2½ Hours]   *[Max. Marks : 70*

Instructions to the candidates:

1) *Attempt Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.*
2) *Neat diagrams must be drawn whenever necessary.*
3) *Figures to the right side indicate full marks.*
4) *Use of calculator is allowed.*
5) *Assume suitable data if necessary.*

Q1) a) What are the rules for overloading operators? **[4]**

b) Write down a C++ program to implement operator overloading for complex class. **[8]**

c) Explain Friend function with example. **[6]**

OR

Q2) a) What is operator overloading? Write a program to overload Unary operator. **[8]**

b) Write down a C++ program for copy constructor for string class. **[6]**

c) Differentiate friend function with normal function of the class. **[4]**

Q3) a) Explain containment and Inheritance along with examples. **[6]**

b) What is Virtual function? Explain how to achieved run time polymorphism. **[6]**

c) Explain function over loading & function overriding in detail. **[6]**

OR

P.T.O.

Q4) a) What does inheritance mean in C++? Give an example of each. **[6]**

b) What is polymorphism? Explain with example to achieved run time polymorphism. **[6]**

c) Write copy constructor for Employee class, in which objects of string class and Date class are the Data members. **[6]**

Q5) a) What is a user defined exception? Write down the scenario where we require use define exceptions. **[6]**

b) What is namespace? To demonstrate namespace with example. **[6]**

c) Explain class template & function template with example. **[5]**

OR

Q6) a) What is stream? Explain types of streams available in C++. **[6]**

b) Explain namespace in C++ with example? **[6]**

c) Compare late binding & early binding. **[5]**

Q7) a) Explain error handling during file operations. **[6]**

b) Write a program using put ( ) to write characters to a file until user enteres a dollar sign. **[6]**

c) Write a note on file operating modes. **[5]**

OR

Q8) a) Explain manipulators for file handling in C++? **[5]**

b) What is file pointer? Write a note on file opening & file closing. **[6]**

c) Explain stream classes hierarchy for file handling in C++. **[6]**

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