

Exam.Code:0916  
Sub. Code: 6246

1058  
B.E. (Computer Science and Engineering)  
Fourth Semester  
CSE-414: Object Oriented Programming

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 (Section-A) which is compulsory and selecting two questions each from Section B-C.

x-x-x

Section-A		
Q 1.	a) How can we overload assignment operator? Comment. b) How many destructors a class can have? Justify. c) Write appropriate statement(s) to move get pointer <b>20 bytes</b> back from end of file. d) What is friend function and what is its use? e) What are class templates?	5*2=10
Section-B		
Q2.	Create a class to represent a vector. It should include the following: <ul style="list-style-type: none"> <li>• Elements of the vector (in form of array)</li> <li>• Size of vector</li> </ul> The class shall support following operations:- <ul style="list-style-type: none"> <li>• Input and display vector elements</li> <li>• To compute the sum of elements of vector.</li> <li>• To find the largest element of the vector.</li> <li>• Add two vectors and assign the result to third using <b>statement</b></li> <li>• Add some scalar to elements of vector eg <code>v1=v1+5;</code></li> </ul>	10
Q3.	a) Define type conversion. How conversion from one class type to another class type be accomplished? b) What is operator overloading? Is it possible to distinguish between prefix and postfix notation while overloading operators? Justify.	5 5
Q4.	a) Consider a class called <i>MyArray</i> having one integer pointer and one char variable. Illustrate the concept of constructor overloading using suitable programming example. b) In case of multiple inheritance, what is order of execution of constructors. Explain with the help of example	6 4
Section-C		
Q5.	a) What do you mean by file pointer? Explain various file opening modes. b) Write a program to open a file and copy its contents to another file	5 5
Q6.	a) Create a template function to sort elements of an array. b) What does binding mean? Is there any alternative to run time polymorphism? Justify your answer.	5 5
Q7.	a). What is polymorphism and discuss its various types. b) Write a program to demonstrate the use of pure virtual functions.	5 5

x-x-x