MCA (CBGS) Sem I 18-11-2015

Sub : Object Oriented Programming

QP CODE: **25308**

[TOTAL MARKS: 80]

(3 Hours)

N.B.: 1) Question No. 1 is Compulsory

2) Attempt any four questions from Q.No.2 to Q.No. 7

Q1. (A) Write a program that reads a text file and creates another file that is identical except that every sequence of consecutive blank spaces is replaced by a single space. **[10]**

(B) What is a friend function? Explain its need in object oriented programming. **[10]**

Q2. (A) Explain the features of object oriented programming language. **[08]**

(B) Write a program to convert distance from meter to centimeter and centimeter to meter using object to object conversion. **[07]**

Q3. (A) Define constructor and destructors in C++. Explain different types of constructors with example. **[08]**

(B) What is operator overloading? Explain with example how pre and post increment operators are overloaded. **[07]**

Q4. (A) Explain the use of try, catch and throw keywords with example. **[08]**

(B) What are the components of Standard Template Library? **[07]**

Q5. (A) What is Multipath inheritance? What ambiguity arises in it? How it can be resolved explain with example. **[08]**

(B) Explain pointers and virtual functions in C++ **[07]**

[TURN OVER

Q6. (A) What are manipulators? Write a program using any four manipulators that t

parameter. [08]

(B) Explain the function templates with multiple arguments with example. [07]

Q7. Write short notes on any THREE [15]

a) Inline Functions.
b) Constant data members and functions.
c) New and Delete operator.
d) Function Overriding.

MCA/ Sem-I(CBSGS)/ Object Oriented Programming /
Nov-16

QP CODE : 513801

Max Time: 3 hours **Max Marks: 80**

N.B.: (1) Question No 1 is compulsory

(2) Answer any four questions from Q.2 to 7

(3) All questions carry equal marks

Q1 a)	Explain Object Oriented Programming principles.	10
b)	Write a program to demonstrate use of constructor and destructor function for Employee class assume appropriate member variables and other member functions.	10
Q2 a)	Explain the difference between 1) new and delete 2) Runtime and Compile time polymorphism	8
Q2 b)	Create a class Vehicle with v_id and name as mamber variables. Create an array of vehicle objects.	7
Q3 a)	Write a program to convert liter to kilogram and kilogram to liter using object to object conversion overloading	8
Q3 b)	What is parameterized constructor? Write a program to demonstrate it.	7
Q4 a)	What is STL? Explain different components of STL in detail	8
Q4 b)	Explain use of Virtual Functions with a suitable example	7
Q5 a)	Explain stream classes in C++ for file handling.	8
Q5 b)	Explain use of try, catch and throw keyword with a suitable example.	7
Q6	Write Notes on a) Constant functions b) manipulators c) Function templates	15
Q7 a)	Create a function called swap_values() that interchanges the values of the two arguments sent to it. (pass these arguments by reference.)	8
Q7 b)	Explain the concept of protected inheritance with suitable example.	7

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