



**DHARMSINH DESAI UNIVERSITY, NADIAD**  
**FACULTY OF TECHNOLOGY**  
**B.TECH. SEMESTER III [IT]**

**SUBJECT: (IT-302) OBJECT ORIENTED PROGRAMMING**

<b>Examination</b>	<b>: Second Sessional</b>	<b>Seat No.</b>	<b>: _____</b>
<b>Date</b>	<b>: 12/09/2012</b>	<b>Day</b>	<b>: Wednesday</b>
<b>Time</b>	<b>: 9:00 to 10:15</b>	<b>Max. Marks</b>	<b>: 36</b>

**INSTRUCTIONS:**

1. Figures to the right indicate maximum marks for that question.
2. The symbols used carry their usual meanings.
3. Assume suitable data, if required & mention them clearly.
4. Draw neat sketches wherever necessary.

**Q.1 Answer the Following :** [12]

**(A) State True or False with proper justification:** [1]

- (a) The overloaded operator must have the operand of type user defined type only.
- (b) A base class is never used to create objects.

**(B) Find out the errors, if any, in the following programs and show the output:**

- (a) [4]
- (b) [4]

**(C) What are the limitations for overloading the increment or decrement operators? How we can solve that?** [2]

**(D) Describe the different data access specifiers with proper example. Give the difference between all.** [4]

**Q.2 Answer the following. (Any three)** [12]

**(A) Overload the arithmetic '+' operator to evaluate  $d2=d1+15.11$  where d1 and d2 are the objects of Distance class. Write proper class definition for that.** [4]

**(B) Find out whether the string is palindrome or not using pointers and function. Pass the string as an argument to a function.** [4]

**(C) What is a Containership? Write a suitable program for that.** [4]

**(D) Overload the '+=' operator which will allow the statement like  $s1+=s2$  where s1 and s2 are the objects of **String** class. This class will allow to add string s2 at the end of string s1.** [4]

**Q.3 Answer the following:** [12]

**(A)** [2]

**(B) Explain the difference between function overloading and overriding with example.** [4]

**(C) Convert the object of Fahrenheit class to the object of Celsius class and vice-versa. (Formula :  $^{\circ}\text{C} = (^{\circ}\text{F} - 32) \times 5/9$  )** [6]

**OR**

**Q.3 Answer the following:** [12]

**(A)** [2]

**(B) What is the difference between pointer constant and pointer variable? Can we perform any arithmetical operation on that? Explain it with example.** [4]

**(C) Describe the ambiguity in multiple inheritance with suitable example.** [6]