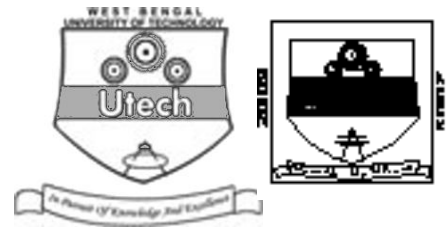


OBJECT ORIENTED PROGRAMMING WITH C++ (SEMESTER - 4)

CS/BCA/SEM-4/BCA-402/09



1.
Signature of Invigilator

2.
Signature of the Officer-in-Charge

Reg. No.

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Roll No. of the Candidate

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CS/BCA/SEM-4/BCA-402/09 ENGINEERING & MANAGEMENT EXAMINATIONS, JUNE – 2009 OBJECT ORIENTED PROGRAMMING WITH C++ (SEMESTER - 4)

Time : 3 Hours]

[Full Marks : 70

INSTRUCTIONS TO THE CANDIDATES :

1. This Booklet is a Question-cum-Answer Booklet. The Booklet consists of **32 pages**. The questions of this concerned subject commence from Page No. 3.
2. a) In **Group – A**, Questions are of Multiple Choice type. You have to write the correct choice in the box provided **against each question**.
b) For **Groups – B & C** you have to answer the questions in the space provided marked 'Answer Sheet'. Questions of **Group – B** are Short answer type. Questions of **Group – C** are Long answer type. Write on both sides of the paper.
3. **Fill in your Roll No. in the box** provided as in your Admit Card before answering the questions.
4. Read the instructions given inside carefully before answering.
5. You should not forget to write the corresponding question numbers while answering.
6. Do not write your name or put any special mark in the booklet that may disclose your identity, which will render you liable to disqualification. Any candidate found copying will be subject to Disciplinary Action under the relevant rules.
7. **Use of Mobile Phone and Programmable Calculator is totally prohibited in the examination hall.**
8. You should return the booklet to the invigilator at the end of the examination and should not take any page of this booklet with you outside the examination hall, **which will lead to disqualification**.
9. Rough work, if necessary is to be done in this booklet only and cross it through.

No additional sheets are to be used and no loose paper will be provided

FOR OFFICE USE / EVALUATION ONLY

Marks Obtained

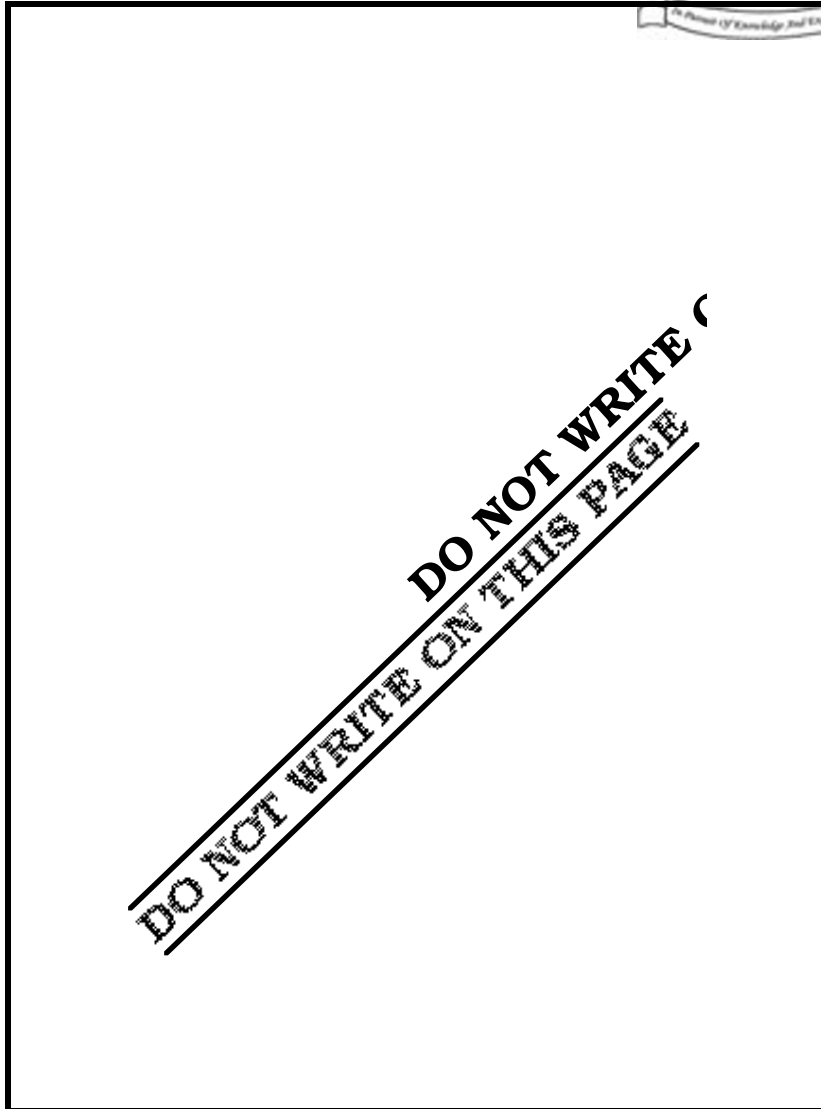
	Group – A										Group – B					Group – C					Total Marks	Examiner's Signature
Question Number																						
Marks Obtained																						

.....
Head-Examiner/Co-Ordinator/Scrutineer

4490 (08/06)



In Pursuit Of Knowledge And Excellence





ENGINEERING & MANAGEMENT EXAMINATIONS, JUNE - 2009
OBJECT ORIENTED PROGRAMMING WITH C++
SEMESTER - 4



Time : 3 Hours]

[Full Marks : 70

GROUP - A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for the following : 10 × 1 = 10

i) Friend function cannot overload operator.

- | | | |
|-------|------|--------------------------|
| a) ++ | b) = | |
| c) + | d) * | <input type="checkbox"/> |

ii) Which operator can not be overloaded ?

- | | | |
|-------|--------|--------------------------|
| a) + | b) - | |
| c) ++ | d) : ? | <input type="checkbox"/> |

iii) Operator overloading is an example of

- | | | |
|-------------------------|------------------------------|--------------------------|
| a) runtime polymorphism | b) compile time polymorphism | |
| c) both (a) and (b) | d) none of these. | <input type="checkbox"/> |

iv) The declaration `int const * p = &a` signifies *p* as *a*

- | | | |
|--------------------------|--------------------------|--------------------------|
| a) constant pointer | b) pointer to an integer | |
| c) pointer to a constant | d) none of these. | <input type="checkbox"/> |

v) The static member function can manipulate only on

- | | | |
|-----------------|-----------------|--------------------------|
| a) global data | b) local data | |
| c) private data | d) static data. | <input type="checkbox"/> |



vi) Base class may be virtual for

a) multiple inheritance

b) multilevel inheritance

c) hierarchical inheritance

d) hybrid inheritance.



vii) Inline function is

a) used to draw a straight line

b) used to draw a curve line

c) made a request to place the code inline

d) none of these.

viii) Template is used to save the

a) memory space

b) programming code

c) variable value

d) variable address.

ix) Constructor is used for

a) copy of the objects

b) Initialization of the data members of class

c) Initialization of objects

d) all of these.

x) Which of the following cannot be passed to a function ?

a) Class objects

b) Arrays

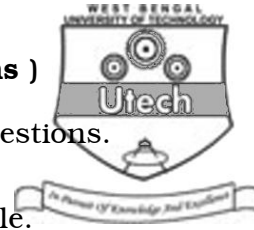
c) Reference variables

d) Header file.



GROUP – B

(Short Answer Type Questions)



Answer any *three* of the following questions.

3 × 5 = 15

2. What are objects ? How are they created ? Give example.
3. What is a constructor ? List some of the special properties of the constructor functions.
What is a parameterized constructor ?
4. What is an operator function ? Describe the syntax of an operator function.
5. What do you mean by inheritance ? What are the different forms of inheritance ? Give an example of each.
6. What does polymorphism mean in C++ ? How is polymorphism achieved at
 - i) compile time
 - ii) run time ?

GROUP – C

(Long Answer Type Questions)

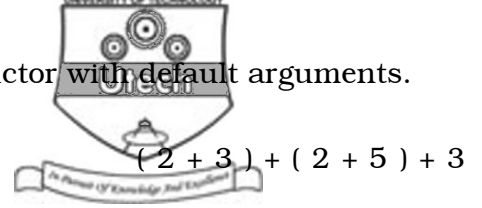
Answer any *three* of the following questions.

3 × 15 = 45

7. a) Write a program that creates a class FLOAT that contains one float data member. Overload { +, -, *, / } all the four arithmetic operators so that they operate on the objects of FLOAT.
b) What is generic programming ? How is it implemented in C++ ? 8 + 7
8. a) What do you mean by 'this' pointer ? How this pointer acts as an implicit argument to all member function ?
b) What is Hierarchical inheritance ? Explain ambiguity resolution in multiple inheritances. (2 + 5) + 4 + 4



9. a) What is inline function ? Write down the limitation of inline function.
b) What is a default argument ? Explain the constructor with default arguments.
c) What is function overloading ?
10. a) What is class Templates ? Give example.
b) Write a program to sort n data items using templates function.
c) What is virtual class ?
11. a) What do you mean by exception handling ? Explain with an example.
b) What are the differences between sequential file and random access file ? Write program to create, insert and display elements in random access file.



END