## 2012

Time: 3 hours

Full Marks: 80

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer from both the Groups as directed.

## Group - A

(Objective Type Questions)

Answer all questions:

1. Choose the correct answer from the following:

2×10 = 20

- (a) Java is purely object oriented and provides:
  - (i) Abstraction, inheritance

CX - 15/4

(Turn over)

(II) Encapsulation, Polymorphism	
(iii) Abstraction, Polymorphism	
(iv) All of above	
(b) The new operator is used to crate a :	
(i) Function object	
(ii) Class object	
(iii) Method object	
(iv) All of above	
(c) Java provides a mechanism for parti	itioning
the class, name space into manag	geable
chunks . This mechanism is	
(i) Interface	
(ii) Inheritance	CA
(iii) Package	no o
(iv) All of above	
(d) Two major classes for byte st	reams
are	
(i) Input and Output	•
CX – 15/4 (2)	Contd.

	(ii) Input Stream and Output Stream	
	(iii) Reader and Writer	
	(iv) None of above	
(e)	By default all the method in interface are	
	(i) Public	
	(ii) Abstract	
	(iii) Both (i) and (ii)	
37U	(iv) None of the Above	
<b>(f)</b>	Operator which concatenate two strings is	
	(i) *.	
	(ii) && Swade only speck (vi)	
	(iii) +	
	(iv) None of the Above	
(g)	(g) How many access modifiers are in java?	
	(i) 3 (ii) 3 (iii) 3 (iii) 3 (iii) 4 (	
	(ii) 5	
CX - 1	5/4 (3) (Turn over)	

	(iii) 4 material material and the control of the co
	(iv) 2
(h)	Final keyword can be applied to
	(i) Method
	(ii) Class
	(iii) Both (i) and (ii)
	(v) None of the Above
(i)	Local objects are objects that execute of
	the
	(i) Host Machine
	(ii) Host Server
	(iii) Other Server
	(iv) None of the above
(i)	Constructor of a class :
	(i) Can be Overloaded
	(ii) Can be overridden
	(iii) Both (i) and (ii)
	(iv) None of the above
	15/4 (4) Cont
CX -	15/4 (4) Cont

## Group - B

## (Long-answer Type Questions)

Answer any four questions:

 $15 \times 4 = 60$ 

- What do you mean by constructor overloading?
   Explain the use of super keyword and Super ()
   method in constructor. Also define how garbage collector works in Java.
- 3. Explain Exception in Java? How it is handled?

  Give example for runtime and compile times exception.
- 4. What is abstract class? Why it is needed? Differentiate between abstract class and interface. Also explain dynamic method dispatch.
  - Write an applet that reads the string and prints it in reverse order. Also check whether it is palindrome or not.
  - Draw and explain JDBC application architecture.
     Explain various types of JDBC driver.

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(5)

(Turn over)

- 7. Write a program that reads a matrix [3] [3] from console and prints the transpose of Matrix.
- 8. What is swing? Explain the features of swing. Write a swing program to implement login process.
- 9. Explain Thread in Java. How it is created? Write a program that creates 5 threads of a class. Demonstrate how priority of thread is changed.

