

COPYRIGHT RESERVED\* BCA(III) — COMP/3/  
XIX/11

**2011**

*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**

**(Objectives Type Questions)**

1. Choose the correct answer of the following :

2×10 = 20

(a) Java provides a mechanism for partitioning the class, name space into more manageable chunks. This mechanism is \_\_\_\_\_.

- (i) Interface
- (ii) Inheritance

JX – 30/2

( Turn over )



- (iii) Package
  - (iv) All of the above
- (b) By defaults all the method in interface are \_\_\_\_\_.
- (i) Public
  - (ii) Abstract
  - (iii) Both (i) and (ii)
  - (iv) All of the above
- (c) Which keyword is used for inherit an interface?
- (i) Extends
  - (ii) Implements
  - (iii) Throws
  - (iv) None of the above
- (d) The two major classes for byte streams are \_\_\_\_\_.
- (i) Input and Output
  - (ii) Input Stream and Output Stream
  - (iii) Reader and Writer
  - (iv) None of the above

(e) Serialization is the key to implementing \_\_\_\_\_ .

- (i) Input Output Stream
- (ii) Persistence Program
- (iii) Program
- (iv) All of the above.

(f) Life cycle of an applet has \_\_\_\_\_ number of methods.

- (i) 2
- (ii) 3
- (iii) 4
- (iv) 5

(g) An event comprise of components are \_\_\_\_\_ .

- (i) Event Object
- (ii) Event Source
- (iii) Event Handler
- (iv) All of the above

(h) The ODBC is written in \_\_\_\_\_ language, a Java program cannot directly communicate with an ODBC driver.

- (i) Java Language
- (ii) C Language



- (iii) Both (i) and (ii)
- (iv) None of the above
- (i) Java soft created the JDBC-ODBC bridge driver that translates the \_\_\_\_\_ .
  - (i) ODBC API to JDBC-API
  - (ii) JDBC API to ODBC API
  - (iii) JDBC API to other API
  - (iv) None of the above
- (j) Local objects are objects that execute on the \_\_\_\_\_ .
  - (i) Host Machine
  - (ii) Host Server
  - (iii) Other Server
  - (iv) None of the above

### Group – B

#### (Long-answer Type Questions)

Answer any **four** of the following :  $15 \times 4 = 60$

2. Explain the life cycle of Thread. How is the inter process communication done in Java?



3. What is abstract class ? Why it is needed ? Differentiate it with interface. Also explain dynamic method dispatch.
4. Discuss the exception handling techniques used in Java. Also explain the difference between **throw** and **throws**.
5. What do you mean by constructor overloading? Explain the use **super** keyword and **super ( )** method in constructor. Also define destructor method of Java?
6. Discuss synchronization in Java with suitable example.
7. Explain Java networking using UDP. Describe, in detail, about Java's Collection Classes.
8. What is Applet? Explain its life cycle. Also explain the various event listeners and their respective handlers of an Applet.
9. What is Swing ? Explain the features of swing. Also write a swing program to implement login process.

