BCA 16 Programming with JAVA

SET: 1

Section-A

(Very Short Answer Questions)

- 1. (i) What is the difference between a JDK and JVM?
 - (ii) What are instance variables?

(iii) Define class and objects.

- (iv) Explain finalize() method.
- (v) What is a package? Which package is imported by default?
- (vi) How is final different from finally and finalize()?
- (vii) When a program does not want to handle exception, the ______class is used.
- (viii) What exception types can be caught by the following handler?

catch (Exception e) { ... }

- (ix) A thread is runnable, how does that work?
- (x) What is the difference between thread and process?

Section-B

(Short Answer Questions)

2. What is method overloading? What are the important points about overloading methods?

3. Explain about explicitly invoking garbage collector and finalize() method with an example.

4. Write all similarities and differences between interfaces and classes with example.

5. What is the difference between throw and throws?

6. What is File Handling? Explain its advantages. Explain the concept of File streams.

7. What do you understand by I/O streams? Differentiate between Byte Stream and Character Stream.

8. Explain the various categories of recursive statements used in Java.

9. What is applet? Describe the complete life cycle of an applet.

Section-C

(Long Answer Questions)

10. What do you mean by object oriented programming? Explain the basic features of java with example.

11. What is a constructor? How does the Java default constructor be provided? Explain parameterized constructor with example. Explain the role of a constructor in base class and derived class.

12. What is an interface? Describe the purpose and application of interface. Give an example for defining and implementing interface.

13. Write a java program to explain the "using final with inheritance".

-----X------

BCA 16 Programming with JAVA

SET: 2

Section-A

(Very Short Answer Questions)

- 1. (i) What is the return type of the main() method? Why is the main() method declared static? (ii) What do you mean by platform independence?
 - (iii) Give two differences between a public and non-public classes?
 - (iv) Explain difference between constructor and method.

(v) What is the importance of static variable?

(vi) Which object oriented concept is achieved by using overloading and overriding?

(vii) The catch clause of the user-defined exception class should ______ its Base class catch clause.

(viii) What is the difference between 'Exception' and 'error' in java?

- (ix) What are the advantages or usage of threads?
- (x) What are the methods of applet life cycle?

Section-B

(Short Answer Questions)

2. What is a copy constructor? Explain with the example.

3. What are decision making statements? Explain the various categories of decision making statements used in Java.

4. Define packages in java. What are the benefits of using package? Explain with suitable example.

5. What is exception handling? What are the various types of exception?

6. What is the main difference between FileReader /Writer and FileInput/output Streams?

7. What is the concept of Thread model and Main Thread?

- 8. How Swings are different from Applets? Explain with an example.
- 9. Explain the process of creating multiple Threads. What is interthread Communication?

Section-C

(Long Answer Questions)

10. How can you implement an array in java, whose size may change during execution of program?

11. What is the difference between String class and String Buffer class? Give three ways of creating a string object. Explain different types of constructors available for 'String' class. Explain the basic methods of 'String' class with illustrative examples.

12. What is a finally block? When and how is it used? Give a suitable example. Demonstrate the usage of multiple catch blocks.

13. What do you understand by inheritance? Explain all type of inheritances used in JAVA.

-----X------