Rajiv Gandhi University of Knowledge Technologies
Object Oriented Programming (E2SEM1)

Paper: EST   **Time:** 3 hours

Date: 03Dec 2016   **Max Marks:** 60

Note: Mention the answers no correctly.
Write answers according to the given marks.

SECTION-A
Attempt all4 question.   **[20 Marks]**
1. State true or false. [5]
   a. init() is called after start() in applet
   b. Declarations must appear at the start of the body of a Java method.
   c. The "switch" selection structure must end with the default case.
   d. Final does not prevent inheritance.
   e. In a java program, package declaration must succeed import statements.

2. Fill in the blanks. [5]
   a. The class string belongs to _____ package.
   b. A(n) _____ is a piece of information passed to a method.
   c. Input to a compiler is called_____.
   d. The term _____ refers to a way of organizing classes that share properties.
   e. If the computer displays an error message while executing your program, the program contains a(n) _____.

3. Multiple Choice. [5]
   a. What will be the result of compiling following code?

   ```
   public class MyClass{
   public static void main(String args[]){
   System.out.println("In first main()");
       }
   public static void main(char args[]){
   System.out.println('a');
       }
   }
   ```

      i. Code will not compile and will give "Duplicate main() method declaration" error

ii. Code will compile correctly but will give a runtime exception

iii. Code will compile correctly and will print "In first main()" (without quotes) when it is run

iv. Code will compile correctly and will print "a" (without quotes) when it is run

b. Which of the following is Java keyword?
   i. External
   ii. implement
   iii. throw
   iv. integer

c. Which of the following method is used to initialize the instance variable of a class.
   i. Class
   ii. Public
   iii. Constructor
   iv. Destructor

d. Which of the following is WRONG statement with respect to rules for overriding Methods?
   i. The method name and the order of arguments should be identical to that of the superclass method.
   ii. The return type of both the methods must be the different.
   iii. The overriding method cannot be less accessible than the method it overrides.
   iv. An overriding method cannot raise more exceptions than those raised by the super class.

e. A _____ is a sequence of bytes traveling from a source to a destination over acommunication path.
   i. string
   ii. stream
   iii. character
   iv. integer

4. Select the best possible association of the following. [5]

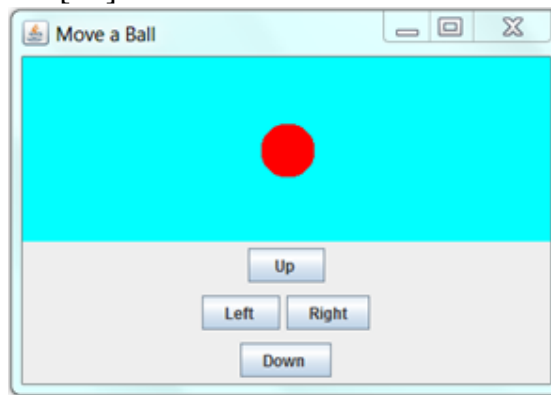| Function	Class/Package
a. add()	**i.** java.lang
b. init()	**ii.** java.awt.Container
c. actionPerformed()	**iii.** java.io
d. read()	**iv.** java.applet.Applet
e. sleep()	**v.** java.awt.event

SECTION-B

Attempt **4(Four)**questions.   **[40 Marks]**

Question no **1 is compulsory**

1. Answer the following question-   [10]
    a. How are Java source code files named?
    b. What is the purpose of default constructor?
    c. What is the difference between the Boolean & operator and the && operator?
    d. What is meant by final class, methods and variables?
    e. What is difference between JDK,JRE and JVM?

2. Write a java applet program to move a ball in response to up/down/left/right buttons, as shown below. [10]

3.
    i. Explain life cycle of a Thread.Explain the procedure to create thread? [6]
    ii. Describe the advantages of OOPs? [4]

4.
    i. Explain various looping structure and their usage in java. [6]
    ii. Explain the use of 'this' and 'super' keywords in java with sample code.[4]

5.
    i. Discuss three built-in packages in java. [6]
    ii. Define recursion and its use.Give an example. [4]

6. Write a java program to create two threads, so that, one thread will print all prime numbers whereas second thread will print all numbers divisible by 7, between 1 to 100 numbers. [10]