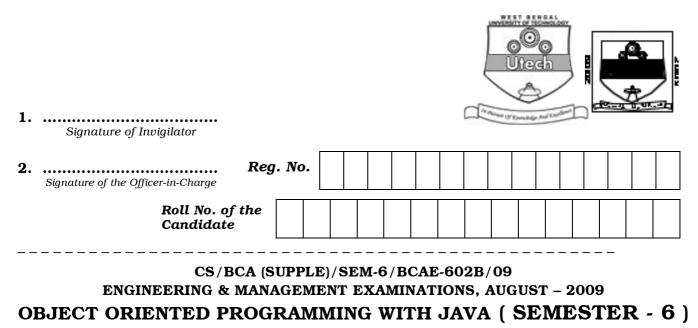
CS/BCA (SUPPLE)/SEM-6/BCAE-602B/09 OBJECT ORIENTED PROGRAMMING WITH JAVA (SEMESTER - 6)



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.

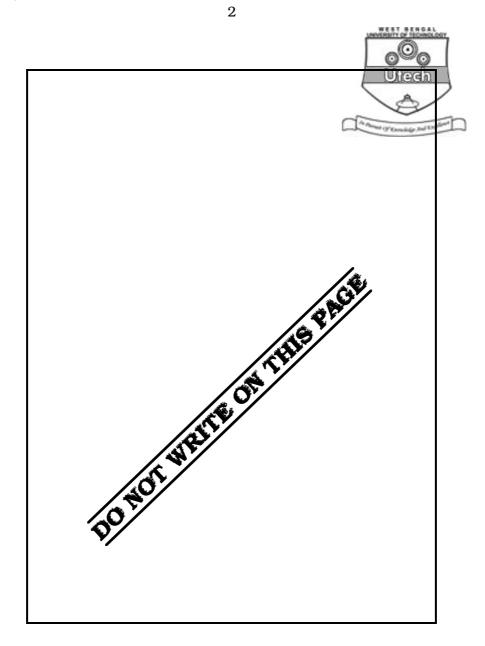
No additional sheets are to be used and no loose paper will be provided

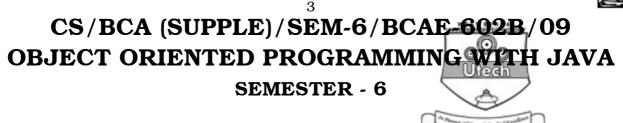
FOR OFFICE USE / EVALUATION ONLY Marks Obtained

	Group – A								Group – B			Gro	up – C		
Guestion														Total	Examiner's
Number														Marks	Signature
Marks															
Obtained															

Head-Examiner/Co-Ordinator/Scrutineer







Time : 3 Hours]

GROUP – A

(Multiple Choice Type Questions)

- 1. Choose the correct alternatives of the following :
 - Which code segment could execute the stored procedure "countRecs()" located in i) a database server ?
 - Statement stmt = connection.createStatement(); stmt.execute("COUNTRECS()"); a)
 - CallableStatement cs = con.prepareCall("{call COUNTRECS}"); cs.executeQuery(); b)
 - c) StoreProcedureStatement spstmt = connection.createStoreProcedure("countRecs()"); spstmt.executeQuery();
 - d) PrepareStatement connection.prepareStatement("countRecs()"); pstmt = pstmt.execute();
 - ii) If (check4Biz(storeNum) ! = null) {}

Referring to the above, what datatype could be returned by method check4Biz()?

- Boolean b) int a)
- c) String d) char.

S-54014 (18/08)



 $10 \times 1 = 10$

Full Marks : 70



```
4
iii)
      int j;
      for(int i=0;,14;i++){
      if(i<10){
      j = 2 + i;
      }
      System.out.println("j:" + j + "i:" + i);
      }
     What is WRONG with the above code ?
           Integer "j" is not initialized
     a)
     b)
           Nothing
     c)
           You cannot declare integer "i" inside the for-loop declaration
     d)
           The syntax of the "if" statement is incorrect.
iv)
     Which one of the followiong is a valid declaration of an applet ?
           Public class MyApplet extends java.applet.Applet {
     a)
     b)
           Public Applet MyApplet {
     c)
           Public class MyApplet extends applet implements Runnable {
     d)
           Abstract class MyApplet extends java.applet.Applet {
V)
     int values [] = { 1, 2, 3, 4, 5, 6, 7, 8 };
     for( int i = 0; i < X; ++i)
      System.out.println( values[i]);
     Referring to the above, what value for X will print all members of array
                                                                                "values"
     ?
           1
                                           b)
                                                  7
     a)
           8
                                           d)
                                                  9.
     c)
```

```
5
vi)
     public int m1(int x){
     int count=1;
     try {
     count + = x;
     count + = m2(count);
     count++;
     }
     catch(Exception e) {count - = x;}
     return count;
     }
                                   when m1(2) is invoked,
                                                                 M2()
     Referring
                to
                    the
                          above,
                                                                        throws
                                                                                 an
     ArithmeticException and m1() returns which one of the following?
     a)
           1
                                         b)
                                               2
           3
     c)
                                         d)
                                               4.
vii)
     Which one of the following statements is false?
     a)
           Java supports multi-threaded programming
           Threads in a single program can have different priorities
     b)
           Multiple threads can manipulate files and get user input at the same time
     c)
           Two threads can never act on the same object at the same time.
     d)
viii)
     Which code declares class A to belong to the mypackage.financial package ?
           Package maypackage; package financial;
     a)
           Import mypackage.*;
     b)
```

- c) Package mypackage.financial.A;
- d) Import mypackage.financial.*;

- ix) What is the value of z? double z = 7/(3 + 0.5);
 - a) 0.5 b) 2.0
 - c) 2.833333333 d) 3.0
- x) What is byte code in the context of Java ?
 - a) The type of code generated by a Java compiler
 - b) The type of code generated by a Java Virtual Machine
 - c) It is another name for a Java source file
 - d) It is the code written within the instance methods of a class.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \propto 5 = 15$

- 2. Explain OOPs properties of Java. "Java is a platform independent language" Explain with the help of JVM. 2 + 3
- 3. What are the types of inheritance available in Java ? Give example. What is the use of super()keyword in Java.
- 4. What is the utility of string tokenizer? Write two methods of string tokenizer. 2 + 3
- 5. What is object serialization in JAVA ? Give an example where you can define function in the interface. 3+2
- 6. What is an abstract class ? Provide a short program to illustrate this. 1 + 4







 $3 \times 15 = 45$

7 GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following.

- 7. Describe applet life cycle. Write a program to show all the steps of applet life cycle. What are the different attribute of applet tag ? What is remote applet ? 3 + 5 + 5 + 2
- 8. What is the difference between string and string buffer ? Write a program in Java to search and edit an existing string. How can an exception be handled in Java ?

3 + 7 + 5

- 9. a) "Programmer can call a constructor from another constructor" Explain with an example.
 - b) Write a program that draws a selected geographic shape in random colour and at random location. The menu choices for the program are Shape

Circle	
Rectangle	
Square	6 + 9

- 10. a) What is the difference between the inner class and nested class ? Give an example for both the classes.
 - b) "In Java variables are initialized before any method called even constructor" —
 Explain with an example.
 - c) What is Singleton class ? 8 + 4 + 3
- 11. What are the types of threads ? How can threds be generated in Java ? Write a program which can throws all the exception catch from the multiple blocks. 2 + 5 + 8

END