

Name :

Roll No. :

Invigilator's Signature :

CS / BCA / SEP.SUPPLE / SEM-6 / BCAE-602B / 2012

2012

OBJECT ORIENTED PROGRAMMING WITH JAVA

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

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

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for the following :

10 × 1 = 10

i) `if(check(storeNum)!=null){ }`

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

- a) Boolean
- b) string
- c) char
- d) byte.

ii) `int j;`

```
for(int i=0;i<14;i++){  
    if(i<10){  
        j=2+i;  
    }  
    System.out.println("j:"+j+"i:"+i);  
}
```

What is wrong with the above code ?

- a) Integer 'j' is not initialized
- b) nothing
- c) you cannot declare integer I inside the for-loop declaration
- d) you cannot print integer values without converting them to strings.



GROUP – B

(Short Answer Type Questions)

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

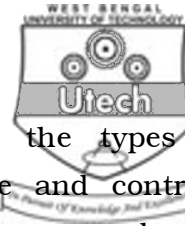
2. Why main () method in Java is declared as static ? Why is a user defined applet class declared as public ? $2\frac{1}{2} + 2\frac{1}{2}$
3. What is JVM ? "Java is platform-independent language." Explain. $2 + 3$
4. What is the difference between an interface and an abstract class ? 5
5. What is a thread ? What are the two methods by which we may stop threads ? $2 + 3$
6. How can programmer define a class that cannot be inherited ? Give an example. $3 + 2$

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

7. Describe applet life cycle. Write a program to show all the steps of applet life cycle. What are the different attributes of applet tag ? What is remote applet ? $3 + 5 + 5 + 2$
8. a) "Programmer can call a constructor from another constructor."— Explain with an example.
b) Write a GUI program in Java that will have two buttons viz., RED and GREEN. If user clicks on RED button the background of the GUI will be painted in red or if user clicks on GREEN button the background of the GUI will be painted green. $5 + 10$



9. What is polymorphism ? What are all the types of polymorphism present in Java ? Compare and contrast overloading and overriding methods with proper examples.

2 + 5 + 8

10. a) What is AWT ? Differentiate between component class and container class.

b) What is an event ? What is event handling ? What is the role of event listeners in this regard ?

c) Show by writing a complete code along with the output how multiple inheritance is implemented in Java. Explain static import. (2 + 2) + (1 + 1 + 2) + (6 + 1)

11. Write short notes on any *three* of the following : 3 × 5

a) Interface

b) Package

c) Final, finally and finalize keywords

d) Container class

e) Exception handler.

