

NEW

2016

BCA

5th Semester Examination (Supplementary)

OBJECT ORIENTED PROGRAMMING USING JAVA

PAPER—3101

Full Marks : 100

Time : 3 Hours

The figures in the margin indicate full marks.

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

Illustrate the answers wherever necessary.

Answer Q. No. 1 and any five from the rest.

1. Answer any *five* questions : 5×2
- (a) Why Java is called "Platform independent language" ?
 - (b) How does a try statement determine which catch clause should be used to handle an exceptions ?
 - (c) What is up casting and down casting in Java.
 - (d) Can we overload a static method in Java ?
 - (e) What is abstract class in Java ?

(Turn Over)

(f) What will be the output of the following code :

```

Class Parent
{
    Void display ( )
    {
        System.out.println ("welcome");
    }
}
Class child extends parent
{
    Void display ( )
    {
        System.out.println ("welcome to java");
    }
    Void show ( )
    {
        display ( );
        Super. display ( );
    }
}
Public Static Void main (String args [ ])
{
    Child C = new child ( );
    C. show ( );
}

```

(g) What is static & dynamic binding ?

2. (a) What is abstraction ? Explain why classes in OOP, known as abstract data types ? 2+2
- (b) What is Java applets ? How is it different from Java application program ? 2+2

- (c) Explain any five interfaces of the Java 10 package? 4
3. (a) What is inheritance? Explain with an example how is multiple inheritance achieved in Java. 2+3
- (b) What is layout manager? Explain any one layouts in Java briefly. 2+2
- (c) What is java Bean? Explain its advantages? 1+2
4. (a) What is Exception? Explain how exceptions are handled in Java. 2+5
- (b) Write a program that will have a Queue class that throws an exception when the Queue is full. Display exception message as "Queue is full." 5
5. (a) What is string Buffer class? How is it different from string class? 2+2
- (b) What is multithreading? Explain the advantages of multithread programs. 2+3
- (c) Write a program to explain how different priorities can be assigned to different threads. 3
6. (a) What is package? How do we add a class or an interface to a package? 2+2

(b) Describe the complete life cycle of a thread ? What is Synchronization ? When is it used ? 4+2+2

7. Write Short Note on (any three) : 3×4

- (a) JVM ;
- (b) Wrapper class ;
- (c) Super Keyword ;
- (d) Import Keyword ;
- (e) Final, finally and finalize.

8. (a) What is static block ?
- (b) What is overloading ? Explain with an example.
- (c) Distinguish overloading and overwriting.

[Internal Assessment : 30 Marks]
