

**2018**

**BCA 5th Semester Examination**

**OOPS USING JAVA**

**PAPER—3101**

*Full Marks : 70*

*Time : 3 Hours*

*The figures in the right-hand 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) What is JVM ?
- (b) What is the use of final keyword in Java ?
- (c) What is an applet ?
- (d) What is a package in Java ?

*(Turn Over)*

- (e) What is an event in Java ?
- (f) "Java is Platform Independent." Explain it.
- (g) Explain the main features of OOPs.

2. (a) What are the feature of Java language ?
- (b) What do you mean by command line argument ?
- (c) Why super keyword is used ? Explain the use of static keyword. 5+3+(2+2)
3. (a) Explain different types of loops used in Java with suitable example.
- (b) List and explain primitive data types used in Java.
- (c) Write down the properties of a constructor in Java. 6+3+3
4. (a) What are the difference between abstract class and interface ?
- (b) What are the difference between method overloading and method overriding ?
- (c) How a class and object are related ? 4+4+4

5. (a) What is polymorphism? Differentiate between compiletime and runtime polymorphism.
- (b) What is the role of garbage collection?
- (c) Explain step of create packages.  $(2+4)+3+3$
6. (a) What are error and exception in Java? How to use throw and throws keyword in exception handling?
- (b) Discuss how try and catch is used in exception handling.
- (c) With an example explain the use of finally block in exception handling.  $(2+4)+3+3$
7. (a) Explain about the important functions used to write an applet in Java.
- (b) Discuss about different types of Streams used in Java.
- (c) What is AWT? Discuss about some AWT controls used in Java.  $5+3+(2+2)$

8. Write short notes on any *three* :

3×4

- (a) Byte code ;
  - (b) GUI ;
  - (c) Constructor chaining ;
  - (d) Layout Manager ;
  - (e) Event Listener.
-