

Roll No.

Printed Pages : 3

1955

BCA / M-19

PROGRAMMING IN CORE JAVA

Paper-BCA-366

Time allowed : 3 hours]

[Maximum marks : 80

Note : Attempt **five** questions in all. **Question No. 1** is **compulsory**. Attempt **four** more questions selecting **one** question from each unit.

1. Answer the following questions in brief: $8 \times 2 = 16$

- (i) Explain the syntax and use of for each loop in JAVA.
- (ii) What is java virtual machine ? Explain its role.
- (iii) What is a string buffer class and how does it differs from string class ?
- (iv) What is inner class ? Give an example.
- (v) What is the role of 'Super' keyword in JAVA ?
- (vi) What is abstract class ? How do you create it in JAVA ?
- (vii) What is the use of finalize method in java ? Explain.
- (viii) Explain the use of paint graphics function used in Applet ?

Unit-I

2. (a) Discuss the historical evolution of JAVA programming. 8
- (b) What are primitive data types available in JAVA ? Explain each with suitable example. Also discuss the usage of wrapper classes. 8

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[Turn over

(2)

3. (a) How can you do formatted input in JAVA ? Explain with suitable examples. 8
- (b) Distinguish between switch and nested if statements in JAVA by giving an example. 8

Unit-II

4. (a) How do you create class and object in JAVA ? Explain with an example. 8
- (b) What is an array ? How arrays are declared and initialized? Explain with examples. 8
5. (a) How do you declare and initialize a string in java and also explain any four string handling functions with suitable examples. 8
- (b) Differentiate between overloading and overriding of methods in JAVA with examples. 8

Unit-III

6. (a) What is multiple inheritance ? How do you implement multiple inheritance in JAVA ? Explain with an example. 8
- (b) What is interface ? Differentiate between interface and abstract class. 8
7. What do you mean by packages in JAVA ? Explain with example how packages can be created, imported and used. Also discuss any three in-built packages in JAVA. 16

Unit-IV

8. (a) What are different types of exceptions in JAVA ? Explain the use of throw and throws keywords by taking an example. 8
- (b) How can you catch more than one exception ? Explain with an example. 8
9. (a) What is an applet ? How can you pass parameters to an applet ? Explain with an example. 8
- (b) What are the different layout managers provided by AWT in JAVA ? Explain any two layouts with suitable examples. 8