

Roll No.

Total Pages : 3

BT-5/D-22

45198

JAVA PROGRAMMING

Paper-ES-301A

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt *five* questions in all, selecting at least *one* question from each Unit-I to Unit-IV. All questions carry equal marks.

UNIT-I

1. (a) Differentiate between object oriented programming language and object based programming language. Write the importance and structure of Java program.
(b) What do you mean by object and class in Java? Write the steps for creating an object from a class and automatic garbage collection. (8+7=15)
2. (a) What is array of characters? Discuss about operations on string handling using string buffer class.
(b) Define abstraction, polymorphism and inheritance? Discuss abstraction through abstract classes. (8+7=15)

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UNIT-II

3. (a) What is CLASSPATH? Write a brief note on packages in Java. Discuss about access protection in packages.
(b) How do you deal with different types of exceptions in Java? Discuss about checked and unchecked exceptions. (8+7=15)
4. (a) What are the different states in lifecycle of thread? Discuss about thread priorities. How does thread communicate with each other?
(b) Briefly discuss about byte and character structure in Java. How do you store and retrieve objects from file? State an example. (8+7=15)

UNIT- III

5. What is an Applet? Explain Applet life cycle. Compare an Applet with a standal one Java application. How do you pass parameters to Applets? (15)
6. (a) What is JDBC? What are the various types of JDBC Driver? Write code snippet for each type of JDBC connection.
(b) Draw the hierarchy of Java AWT classes. How do you create a frame in AWT by extending frame class? (8+7=15)

UNIT-IV

7. (a) What is delegation event model? Discuss event classes in JAVA. How events are handled within the class and by other class?
(b) Discuss the role and advantages of Servlets in web application development. (8+7=15)
8. Write notes on the following :
(a) Java server pages.
(b) Single thread model. (8+7=15)

