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Question Paper Code : 11145

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2014.

Fifth Semester

Computer Science and Engineering

080230021 — JAVA PROGRAMMING

(Regulation 2008)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. How can you minimize the need of garbage collection and make the memory use more effective?

2. How is multiple inheritances achieved in Java?

3. What is the use of super keyword?

4. Name a few String methods.

5. What are checked and Unchecked Exception?

6. When a thread is created and started, what is its initial state?

7. Compare Application and Applet.

8. Draw the AWT event hierarchy.

9. Can you write a Java class that could be used both as an applet as well as an application?

10. What can go wrong if you replace && with & in the following code:

String a = null; if (a! = null & & a.length ( ) > 10) {....}

PART B — (5 × 16 = 80 marks)

11. (a) (i) Explain the methods under 'object" class and 'class" class. (10)

(ii) Write a program to create a room class, the attributes of this class is roomno, roomtype, roomarea and ACmachine. In this class the member functions are setdata and displaydata. (6)

Or

(b) (i) Develop a static Inner class called Pair which has MinMax method for finding min and max values from the array. (8)

(ii) Develop a message abstract class which contains playMessage abstract method. Write a different sub-classes like TextMessage, VoiceMessage and FaxMessage classes for to implementing the playMessage method. (8)

12. (a) Explain the methods available under String and String Buffer Class. (16)

Or

(b) (i) Develop a Library interface which has drawbook( ), returnbook() (with fine), checkstatus() and reservebook() methods. All the methods tagged with public. (8)

(ii) Explain method overriding with an example program. (8)

13. (a) How Java handle overflows and underflows? Write a program for creation of user defined exception. (16)

Or

(b) Write a program to create a class MyThread in this class a constructor, call the base class constructor, using super and starts the thread. The run method of the class starts after this. It can be observed that both main thread and created child thread are executed oncurrently. (16)

14. (a) Write an applet program to create a grid layout control, a border layout control and a padding layout control. (16)

Or

(b) Explain with example about the two types of Set implementations available in the Collections Framework. (16)

15. (a) Differentiate between Enumeration, ArrayList, Hashtable and Collections and Collection. Explain string tokenizer with example. (16)

Or

(b) Using GregorianCalendar class, Write a Java program to display current system date and time. (16)

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