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3178

Reg. No. :

Name :

**Fifth Semester B.Tech. Degree Examination, May 2009
(2003 Scheme)**

**Branch : ELECTRONICS AND COMMUNICATION
03-506 : Elective – 1 : Java and Internet Programming (TA)**

Time : 3 Hours

Max. Marks : 100

PART – A

Answer **all** questions :

(4×10=40 Marks)

1. What is type casting ? Give examples.
2. Which of the following arithmetic expressions are valid ?
 - a) $25/3\% 2$
 - b) $15.25 + - 0.5$
 - c) $21\% (\text{int}) 4.5$
 - d) $7.5\% 3$
3. Differentiate applets and application programs.
4. How a Java thread is blocked ?
5. Give examples for GUI components available in Java.
6. State the steps involved in creating a disk file.
7. Define objects and classes. Explain data encapsulation.
8. Explain Java programming environment.
9. What are stream classes in Java ? Give two examples.
10. What are random access files in Java ?

P.T.O.



PART – B
Module – I

Answer **any two** questions.

11. Write a Java program that initiates two threads, one printing numbers 1 to 100 in ascending order, and the other in descending order. **10**
12. Explain briefly how :
 - a) Java achieves platform independence. **5**
 - b) Java manages memory allocation and de allocation of objects. **5**
13. It is required to develop a software using Java that tracks the attendance of a Java training course of duration of 10 days. There are two sessions every day, and each session is associated with one of 5 chapters. Attendance need to be tracked at the level of every session, every chapter and at the course level. Identify classes, essential methods, and the relation between classes required for this program. **10**

Module – II

Answer **any two** questions.

14. Write a Java program that loads an image file and shows it up in a frame. **10**
15. Write Java applet that shows up a frame on which the current locations of the mouse are printed. **10**
16. Explain the GUI programming support provided by Java Abstract Toolkit. **10**

Module – III

Answer **any two** questions.

17. Write a Java program that reads input from a text file using Buffer Reader and stores the content in a string. **10**
 18. Explain :
 - a) How database connectivity is supported in Java ? **5**
 - b) Client server interaction is implemented in Java. **5**
 19. Explain the exception handling capabilities of Java with the help of sample programs. **10**
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