ADIT/BIT PROGRAMME

00179

Term-End Examination
June, 2010

CST-301 : INTERNET TECHNOLOGIES

Time : 2 hours *Maximum Marks : 50*

Note : *All questions from **Section A** are **compulsory**. All objective type questions carry **one** mark each. Answer any **two** questions from **Section B**.*

SECTION-A

In question **1**, if you feel that none of the choices offered is correct, then mark "**0**" as your answer.

1. A Java method can return values of type : **1**

(a) boolean

(b) long

(c) user defined object

(d) All the above

2. Which of the following is true for parameter passing ? **1**

(a) Primitive data types are passed by value; objects are passed by reference

(b) Primitive data types are passed by reference; objects are passed by value

(c) Both are passed by value

(d) Both are passed by reference

3. A try block must have : 1

(a) A finally clause

(b) At least one catch clause

(c) Both a finally and at least one catch clause

(d) At least one catch or a finally clause

4. Deadlock errors can be difficult to detect because : 1

(a) the code involved is complex

(b) the condition may occur only rarely

(c) the condition depends on native methods

(d) At least 4 threads have to be involved for it to occur

5. An interface : 1

(a) must have at least one method

(b) must not have any data variables

(c) must implement at least one method

(d) none of the above

6. The exec() method allows us to : 1

(a) Invoke a executable program from within a method

(b) Terminate a running thread

(c) Start a new thread

(d) All of the above

7. To change a string object one must first copy it to : 1

(a) Another string object

(b) A string Buffer object

(c) An Array object

(d) A Char object

8. The files of any package must be defined in : 1

(a) Must all be defined in one file

(b) Can be defined in any number of files

(c) Can be defined in up to 4 files

(d) Depends on java implementation

9. Parentheses are used in expressions to : 1

(a) Change operator precedence

(b) Speed up your program

(c) Slow down your program

(d) Improve security by making your program more difficult to understand

10. Where two scopes are nested ? 1

(a) Objects in both are visible to each other

(b) Objects in the outer scope are visible to the inner

(c) Objects in the inner scope are visible to the outer

(d) Objects in either are **not** visible to the other scope

11. Write HTML code to make a simple wedding website. 10

(a) Have a homepage that shows a video clip

(b) Make a simple navigation scheme

(c) Give information on various events/ ceremonies

(d) Give information on the couple

Note : Make and state any needed assumptions.

SECTION - B

Answer **any two** questions from this section.

12. (a) Write a Java program to input two numbers. Find their Arithmetic, Geometric and Harmonic means and arrange them in descending order. **8**

(b) Write HTML code to place three images of size 100×100 pixels on the screen horizontally irrespective of the size of the browser window. Below the images place an unordered list of 3 items in small italicised blue font. The first image or first item in the list both take you to page 1 of the site, and likewise for image 2 and item 2 as well as image 3 and item 3 that take you to pages 2 and 3 respectively. **7**

13. Distinguish between the following with an appropriate example : **5x3=15**

(a) Anonymous and inner classes

(b) Byte streams and character streams

(c) paint() and repaint() methods of an applet

(d) is infinite() and is NaN() methods

(e) ? operator and if statement

14. (a) Write HTML code to create a form with just one field where the value must be between 1 and 4. Take the user to a different screen depending on the value entered. **5**

(b) Write an applet that counts the number of characters typed at the keyboard. When a period(.) is entered, it displays the count and then again starts counting characters. **5**

(c) Write a Java program to sort n numbers in ascending order using recursion. **5**

Hint : First find the minimum of the numbers.
