Advanced Diploma in Information Technology (ADIT) / Bachelor in Information Technology (BIT)

Term-End Examination

December, 2006

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

1. A protected method is accessible from
   (a) same package only
   (b) a subclass only
   (c) all classes
   (d) no other class

2. The return value of the successful assignment statement y = 5; is
   (a) void
   (b) undefined
   (c) true
   (d) 5

3. In a Java array
   (a) different elements can have different data types
   (b) all elements must be of the same data type
   (c) only int is allowed
   (d) only double is allowed

4. notify( ) wakes up

   (a)   all threads that called wait( ) on the object

   (b)   last thread that called wait( ) on the object

   (c)   the first thread that called wait( ) on the object

   (d)   the thread with the highest priority that called wait( ) on the object

5. The scope of a variable defined in the initialization portion of a for loop is

   (a)   the entire program file

   (b)   the whole class

   (c)   the whole method

   (d)   the whole for statement

6. To access a class in another package

   (a)   just use the class name — nothing special needed

   (b)   must give fully qualified class name

   (c)   this is not allowed

   (d)   use the keyword foreign before the class name

7. The trim( ) method of class string removes

   (a)   leading blanks from a string

   (b)   trailing whitespace from a string

   (c)   trailing blanks from a string

   (d)   leading as well as trailing whitespace from a string

8. In the map interface

   (a)   values must be unique

   (b)   keys and values must both be unique

   (c)   only keys must be unique

   (d)   neither keys nor values need be unique

9. Which of these modifiers is *not* allowed for methods ?

   (a)   Final

   (b)   Public

   (c)   Package

   (d)   Private

10. To retrieve applet specific parameters, it uses

(a) PARAM attribute

(b) VALUE attribute

(c) getParameter( ) method

(d) NAME attribute

11. Write HTML code to create a webpage with the title "A simple website". Run an applet when the page appears, with a link that lets the user go to the next page. That page has images of two products side by side. Clicking on either image takes the user to a page that describes the chosen product.

SECTION B

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

12. (a) Write a Java program to accept two natural numbers less than 100. Resolve each into its prime factors and find the LCM of the two numbers.   8

(b) Write HTML code to show a web page with three paragraphs. The first has text in red italics. The second has black text in the largest available font size. The third paragraph has text in bold in the smallest font size. At the end of each paragraph is a link to go back to the top of the page.   7

13. Distinguish between the following with a suitable example for each :   15

(a) init( ) and start( ) methods in applets

(b) double and Double

(c) equals( ) method and ==

(d) throw and throws keywords

(e) Inputstream and Reader classes

14. (a) Write HTML code to show a welcome image with a fixed size of 100×200 pixels. On clicking this one reaches a second page with a numbered list giving 3 benefits of a product. This page has a second paragraph that gives information about the company as preformatted text.   5

(b) Write an applet that counts the number of keys pressed on the keyboard.   5

(c) Write a program to input a binary number from the keyboard and output it in octal form.   5