

Bachelor in Information Technology (BIT)

Term-End Examination

December, 2006

CSI-03 : SOFTWARE CONSTRUCTS AND TOOLS

Time : 2 Hours

Maximum Marks : 60

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

SECTION A

1. What key combination takes you to the first column in a row in a spreadsheet from anywhere in that row ? 1
 - (a) Shift + Home
 - (b) Home
 - (c) Control + Home
 - (d) Control + ←
2. How can you select a range in a spreadsheet ? 1
 - (a) Go to beginning, shift key pressed, drag with mouse till end of range
 - (b) Same as (a) but with control key pressed
 - (c) Same as (a) but with Alt key pressed
 - (d) Not possible
3. How can you put a new line within a cell ? 1
 - (a) Use Enter key
 - (b) Press Alt + Enter
 - (c) Press Shift + Enter
 - (d) Press Control + Enter
4. Which key combination will undo your last action ? 1
 - (a) Control-Y
 - (b) Alt-Y
 - (c) Control ←
 - (d) Alt ←

5. What is the width (in terms of behaviour) of a double in Java ? 1
- (a) 4
 - (b) Compiler dependent
 - (c) 8
 - (d) 2
6. Which of the following modifications to a font is **not** possible in Excel ? 1
- (a) Bold
 - (b) Superscript
 - (c) Changing angle of italics
 - (d) Changing angle of orientation in a cell
7. In which case would you get an error message when trying to insert a row ? 1
- (a) Only first row has data
 - (b) Only last row has data
 - (c) The row above is blank
 - (d) Both first and last rows have data
8. Which of the following is false about an import statement ? 1
- (a) Must be the first statements in a file
 - (b) Can be preceded by a comment
 - (c) Can be preceded by a package statement
 - (d) Can be preceded by any statement other than package
9. The final modifier **cannot** appear before a 1
- (a) class
 - (b) method
 - (c) variable
 - (d) statement
10. The value of an instance variable **not** explicitly assigned is 1
- (a) 0
 - (b) null
 - (c) random
 - (d) undefined

11. (a) Write a Java program to input two arrays with the same number of elements. The output should be an array where each element is the product of the two corresponding elements in the input arrays. 10
- (b) How would you insert a pie-chart in a separate sheet in a workbook to show the values in some column of the spreadsheet ? Describe the main options you can change for the chart. 10

SECTION B

Answer any two questions from this section.

12. Distinguish between the following : 15
- (a) Inner class and static nested class
 - (b) Private and protected class member modifier
 - (c) Character class and char data type
 - (d) Case and default keywords
 - (e) While and do-while loops
13. (a) Describe with suitable examples the various facilities available in Excel for auditing formulae. 9
- (b) Explain briefly 6
- (i) Volatile variable
 - (ii) Casts
 - (iii) Interfaces
14. (a) Write a Java program to input a natural number n and output the sum of the first n natural numbers. Use recursion. 8
- (b) In a spreadsheet you need to highlight every cell in a column with blue if its value is 0, with red if the value is negative and with green if its value is positive. How will you do this ? Also describe how you will arrange for the column to show only positive values. 7