

Uva Wellassa University, Sri Lanka
End Semester Examination – August 2010
IIT 111-1 Foundation of Problem Solving with
Programming



Time: One (01) hour

Total 03 Questions
Answer ALL questions.

Q1. Develop a complete problem definition for the following problem:

Write a program to count the number of girls in the IIT degree program, boys in the IIT degree program, girls in the CST degree program, and boys in the CST degree program at Uva Wellassa University.

(20 marks)

Q2. Write an algorithm to find the maximum of 10 integers.

(20 marks)

Q3. The diploma in programming examination at LearnComp Institute consists of 7 parts. Students may sit for any number of parts at any one attempt. The examination fees are computed as follows:

Examination fees = Amount for parts sitting + Registration fees

Where

Registration fees Rs. 500/=

Amount for parts is calculated as follows:

Less than five parts Rs. 800/= per part.

Five parts or more Rs. 4000/=

The manager requires a program to compute the examination fees and print a receipt with the *name of the student, registration number, no. of parts sitting* and the *fees*. The program should process for any number of students as the user wishes. In addition total fee for all students is to be computed and printed at the end of the program.

- (i) Write clear statement of the input required and the output produced by the program.
- (ii) Break down the problem into simple tasks.
- (iii) Write the algorithm.

(60 marks)

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