

EASTERN UNIVERSITY, SRI LANKA  
FIRST EXAMINATION IN SCIENCE 2002/2003 (Re-repeat)  
FIRST SEMESTER (June/July' 2003)  
CC102 Introduction to PC Applications



Answer all questions

Time allowed: 1 hour

- 1.
- (a) If  $x=2945$ , what is the value of each of the following expressions?
- i.  $x \% 10$
  - ii.  $x / 10$
  - iii.  $(x/10)\%10$
  - iv.  $(x/100)\%10$
- (b) Write a program that calculates and prints the quotient and remainder of two integers.
- (c) Write a program that determines a student's grade. It reads three test scores (between 0 and 100) and compute a student's grade based on the following rules:
- i. If the average score is 90% or more, the grade is A
  - ii. If the average score is 70% or more and less than 90%, the grade is B
  - iii. If the average score is 50% or more and less than 70%, the grade is C, otherwise it is D

2.  
Discuss the looping constructs in C++.

Write a program that creates the following pattern, given the number of rows.

```
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

Repeat your program using other looping constructs.