

EASTERN UNIVERSITY, SRI LANKA
EXTERNAL DEGREE IN SCIENCE
FIRST EXAMINATION IN SCIENCE 2002/03
FIRST SEMESTER (June/July, 2004)
EXCS 152 Practical Work on EXCS 103



Answer all Questions

Time allowed: 03 hours

Q1 Given the following declarations

```
int numLetters;    // Number of letters in user's last name
int i;             // Index variable
char * list;       // Pointer to array of letters in user's last name
```

Write a program that prompts the user for the number of letters in his or her last name, dynamically creates a **char** array of exactly the right size to hold the letters, inputs the letters, prints out the letters in reverse order and deallocates the array. Save your work in the file name *User.CPP* in your floppy disk.

Q2 Define a structure type "*student*" which has the following fields:

- Index number* – an integer
- Name* – a string of maximum length 25
- Marks1, Marks 2* – floating point numbers
- Total* – the sum of *Marks1* and *Marks2*

Define an array *MarksSheet* with elements of type *student*.

Write a program to do the following tasks:

- Use the above definition to store the details of 5 students.
- Display the final result (pass/.fail) in the ascending order of aggregates.

a candidate is considered as pass, if he/she obtain over 50 marks for each subject and over 65 mark as average

Save your work in the file name *Marks_Sheet.CPP* in your floppy disk.