PLEASE ANSWER ALL QUESTIONS.   **Total 40 Marks**

QUESTION 1   (5 Marks)

Draw a flowchart to find the smallest among n different numbers entered by user.

QUESTION 2   (5 Marks)

Convert the following decimal value to its binary equivalent and show all the calculations while performing the conversion:

$$(BED)_{16} = (????)_8$$

QUESTION 3   (10 Marks)

Following is pseudocode snippet of a computer program:

```
percentage: number
if percentage > 59
then
    if percentage > 69
    then
        if percentage > 79
        then
            display "A"
        otherwise
            display "B"
    otherwise
        display "C"
otherwise
        display "F"
```

Predict the output for the following cases
   a) percentage $= 64$
   b) percentage $= 72$

QUESTION 4   (10 Marks)

Write a C program which takes an alphabet from the user and displays whether that alphabet is lowercase or uppercase.

QUESTION 5 (10 Marks)

Write the C program for the following flowchart: