INFORMATION TECHNOLOGY

**FORM 4**

TOPIC: PROBLEM SOLVING AND PROGRAM DESIGN

**ASSIGNMENT#1**

Teacher: Ms Vialva

**Due Date: 25th April 2012**

1. In a university the pass mark is 40%. Write a **pseudocode** that accepts a student’s mark. It prints ‘Fail’ if the student gets less than 40 marks or ‘Pass’ if the student gets 40 marks or more.
2. Write **pseudocode** to determine a worker’s net pay based on the following. Get the worker’s hours worked. If the hours worked is less than or equal to 40 then regular pay is calculated by multiplying the hours worked by the rate of pay and overtime pay is zero. If the hours worked is greater than 40 then the regular pay is calculated by multiplying 40 by the rate of pay and overtime pay is calculated by multiplying the **hours worked in excess of 40** by the rate of pay by 1.5. Net pay is calculated by adding regular pay and overtime pay. For example if hours worked is 36 and the rate is 20 dollars per hour, regular pay is $720 (36\*20) and overtime pay is $0. Net pay is $720. And if hours worked is 50 and the rate of pay is 12 dollars per hour then regular pay is $480 (40 \* 12) and overtime pay is $180 (excess hours 10 times 12 times 1.5). Net pay is $660 (480 +180).
3. Write a **pseudocode** to accept a person’s score in a test and print a letter grade based on the following:

Score <50 F

50 <= Score < 75 B

Score >=75 A

1. A variety store gives a 15% discount on sales totalling $300 or more. Write a pseudocode to get the cost of 3 items and print the amount the customer must pay.
2. A bank pays interest based on the amount of money deposited. If the amount is less than $5000 the interest id 4% per annum. If the amount is $5000 or more but less than $10000 then the interest is %5 per annum. If the amount is $10000 or more then the interest is 6%. Write pseudocode to accept the amount deposited and print the interest earned for the year.

**Note that the following can be used in solving more than one of these problems:**

***If <condition1> then***

 ***Statement(s)***

***Else if <condition2> then***

 ***Statement(s)***

***Else***

 ***Statement(s)***

***Endif***

***.***