People's Democratic Republic of Algeria

El Arbi Ben M'hidi Oum el Bouaghi University

Department of Material Science

Module: informatique I

Year: 1st Year LMD

Typical correction

Exercise 1:

1. $(13)_{10}$=1101, $(23)_{10}$=10111 **1.5 pts**
2. $(1111)_2$=15, $(110011)_2$=51 **1.5pts**
3. $Log_2(128)$=7 bits **1.5pts**
4. 255 **1.5pts**

Exercise 2

1- *x and True= x* **1pt**

2- *not ((x<6)or (x>11))=x>=6 and x <= 11* **1pt**

3- *a and (not a or b)= a and b* **2pts**

Exercise 3

1- **2pts**

N°	A	B	I	M
1	/	/	/	/
2	15	4	/	/
3	15	4	/	0
4	15	4	1	0
5 true	15	4	1	0

2- Yes there is an error because the program in line 5 enter in infinite loop to correct it we need to delete the semi-colon ; **2pts**

3- The goal of this program is to calculate A times B with successive addition **2pts**

Exercise 4 4pts

Program gcd;

Var A,B : integer;

Begin

```
 Readln(A,B);
While (A<>B) Do
    If A> B then
        A:= A-B
    Else
        B:= B-A;
Writeln('gcd=',A)
Readln;
End.
```