**QUIZ 01 SOLUTION**

**Q1:- Given an assembly instruction in decimal (8130)10. Convert and find its equivalent in hex and binary?**

**Binary**

|  |  |
| --- | --- |
| 2 | **8130** |
| 2 | 4065 – 0 |
| 2 | 2032 – 1 |
| 2 | 1016 – 0 |
| 2 | 508 – 0 |
| 2 | 254 – 0 |
| 2 | 127 – 0 |
| 2 | 63 – 1 |
| 2 | 31 – 1 |
| 2 | 15 – 1 |
| 2 | 7 – 1 |
| 2 | 3 – 1 |
|  | 1 – 1 |

**(1111111000010)2**

**Hexa decimal**

**0001 1111 1100 0010**

**1 F C 2**

**(1FC2)16**

**Q2:- What are the technical reasons behind architect multi core technology as compared to existing single core? Answer briefly.**

In single core heavy program takes more time, when two task perform at same time it take much more time whereas in case of multi core a program is divided into small parts and is shared by the different cores therefore a task is performed in less time. Secondly, performance is much better in case of double core instead of single core.

**Q3:- Is assembly language platform dependent? Give reason for your answer?**

Yes, assembly language is platform dependent because it is much closer to the machine language and it is written according to the registers present on a system, this is the reason that’s why when a code is written on a system may not be executed on any other system working on a different schema of register.

**Q4:- Assume Accumulator register and base register having values, AX = 1FC2H and BX = FF10H?**

1. **Write assembly language instruction to move content of BX to AX? What would be value of both register after above instruction execution?**
2. **Write AL instruction to overwrite lower 8 bits of BX by F9H? What would be final value of BX now?**
3. MOV AX,BX

Before instruction executed

AX = 1FC2H

BX = FF10H

After instruction executed

AX = FF10H

BX = FF10H

1. MOV BX,0F9H

Before instruction executed

BX = FF10H

After instruction executed

BX = FFF9H

**THE END**