Computer Organization & Assembly Language (CMP-223-3)

University of Punjab (Jhelum Campus) | *BSCS 4th Semester (Morning) Section A|B*

ASSIGNMENT #01   **Total Marks: 60**

1) Differentiate between computer organization and computer architecture by giving relevant examples. **(5 Marks)**

2) Why should we learn assembly language? How does assembly language relate to high-level languages? **(5 Marks)**

3) What is a motherboard? Differentiate between northbridge and southbridge by explaining and listing the components of each. **(5 Marks)**

4) What is the importance of memory in computers? Briefly explain about ROM, RAM, Cache, Flash memory. **(5 Marks)**

5) What do you know about machine language? Also, differentiate between mnemonics and opcode/operation code. **(5 Marks)**

6) Give your understanding on the following listed items **(5 Marks)**
   o interpreter
   o compiler
   o assembler
   o linker

7) What is an embedded system? What is the real-world application of embedded systems? **(5 Marks)**

8) List the top 5 manufacturers of microprocessors and briefly describe CPU structure. **(5 Marks)**

9) What is number system? Explain briefly about binary and hexadecimal number systems by adding examples and comparisons into your answer. **(10 Marks)**

10) Compare between the logic gate and memory cell. What do you know about AND, OR, NOR, XOR, bits, and bytes? **(10 Marks)**

SUBMISSION INSTRUCTIONS

This is a **group assignment** **that can be submitted until midnight on** **Sunday, March 28, 2021**

Your submission should be in **.pdf format**, and not be less than **20 pages**.

Write in your own words, and **Do Not Plagiarize** (avoid stealing/copying stuff).

Inclusion of **references will be encouraged** (use a separate page for putting them)

Submit via Google Classroom only (do not send through emails or WhatsApp)

Font Style & Page Layout

✔ Use Calibri or Cambria font only

✔ Bold the headings and underline them

✔ Font size should be 12 for headings, 11 for sub-headings, and 11 for paragraph writing

✔ Use a custom margin of 1.78cm for top and 2.03cm for each other side i.e. bottom, left, right

Group ID	Group Name	Group Leader (Name)
1	Hustlers	Muhammad Ammar

List of Students in a Group

	Student Name	Student ID
1	Muhammad Ammar	BSCS_F_19_M_63
2	Muhammad Shaban Zaman	BSCS_F_19_M_65
3	Harris Bin Abod	BSCS_F_19_M_84
4	Noman Shoib	BSCS_F_19_M_86
5		

Lecturer	Contact Email	Due Date
Muhammad Irfan	irfan.pujcit@gmail.com	March 28, 2021

Student(s) Comments:
➔ Alhamdulillah, we had a Nice time, solving Assignments.
➔ One thing I wanna say, Sorry for being late for submission :)

Teacher Comments: *(leave blank)*