



COMSATS University Islamabad, Attock Campus

Department of Computer Science

SAMPLE PAPER

Program: BSCS/BSAI

Course: - Microprocessor & Assembly Language

Time: 90 Min

Dated: XX XX 2023

Marks: 50

Name: - _____ Reg. No: - _____

Note: - Do not write anything on Question Paper except your Name & Registration Numbers.

Q. #1 Answer the following short questions concisely in 4-6 lines. (CLO-I) [5 x 3 = 15 Marks]

- Give the primary advantage of assembly language programming.
- What is an assembler directive? Describe DB, EQU and. MODEL.
- What are the differences between a register and a memory location?
- Determine the physical address of a memory location given by 0A51:CD90h?
- Write Consider a machine language instruction that moves a copy of the contents of register AX in the CPU to a memory word. What happens during the fetch cycle??

Q. #2 Describe the syntax, purpose and usage of the followings. (CLO-II) [5 x 3 = 15 Marks]

MOV, INT, JNLE, JMP, PROC

Q. #3 Assembly language program (All segments). (CLO-III) [6 + 6 + 8 = 20 Marks]

- Write a program to (a) display a "?", (b) read two decimal digits whose sum is less than 10, (c) display them and their sum on the next line, with an appropriate message.
- Write a program to display the ASCII characters (ASCII codes 80h to FFh). Display 10 characters per line, separated by blanks.
- Write a program to read an uppercase letter (in case of lowercase letter or digit ask user to enter uppercase letter) and display it at the next position on the next line in lower case.