| ADAMAS UNIVERSITY PURSUE EXCELLENCE | ADAMAS UNIVERSITY END (EVEN)SEMESTER EXAMINATION: MAY 2021 (Academic Session: 2020 – 21) | | |
|-------------------------------------|--|--------------------|----------|
| Name of the Program: | B. Tech. (EE) | Semester: | IV |
| Paper Title : | Microprocessor and Microcontroller | Paper Code: | EEE42104 |
| Maximum Marks : | 40 | Time duration: | 3 Hours |
| Total No of questions: | 08 | Total No of Pages: | 01 |

Answer all the Groups

Group A

(Answer all the questions)

 $5 \times 1 = 5$

1)

a) Name the two types of architecture for microprocessors. [CO5]

b) Define program counter in 8085 microprocessor. [CO3, CO1]

c) Give an example and define DAD. [CO1, CO3]

d) What is LCALL?

[CO4]

e) Explain AJMP with example.

Group B

(Answer any three of the following)

$$3 \times 5 = 15$$

2) Differentiate amongst JMP, JNC, JNZ and JZ in 8051.

[CO4]

- 3) Explain the on-chip memory configuration in 8051 microcontroller. [CO4, CO5]
- 4) Write a program to find the largest number in an array for 8085. [CO1, CO3]
- 5) Write short note on flags of 8051.

[CO4]

Group C

(Answer any two of the following)

$$2\times10=20$$

- 6) Explain in details the mode definition format in 8255 with suitable program word diagrams. [CO2, CO5]
- 7) Write and demonstrate with an example a program to find cube of a number in an 8085 microprocessor. [CO3, CO1]
- 8) Draw the pin diagram of ADC0804. Describe the interfacing of 8086 with ADC0804 with relevant program. [CO2,CO5] (5+3+2=10)