ADAMAS UNIVERSITY **END-SEMESTER EXAMINATION: JANUARY 2021** (Academic Session: 2020 - 21) V Name of the Program: B. Tech. **Semester:** Paper Title: Microprocessor and Microcontroller Paper Code: EEC43101 Maximum Marks: 40 Time duration: 3 Hrs **Total No of questions:** 8 Total No of 1 Pages:

Answer all the Groups Group A

Answer all the questions of the following $5 \times 1 = 5$

a) Name the two types of architecture for microprocessors. [CO5]
b) Define stack pointer in 8085 microprocessor. [CO1]
c) What is the function of DAD mnemonic in 8085 microprocessor? [CO1, CO3]

d) What are the basic differences between 8085 and 8086 microprocessor? [CO1, CO2]

e) What are the ports of 8255? [CO5]

GROUP -B

Answer *any three* of the following $3 \times 5 = 15$

2. Draw and explain the architecture of 8085 microprocessor. [CO1]

3. Explain the various addressing modes in 8051 microcontroller with examples. [CO4]

4. Explain the on-chip memory configuration in 8051 microcontroller. [CO4, CO5]

5. Draw and explain the Flags in 8051 microcontroller. [CO4]

GROUP-C

Answer *any two* of the following $2 \times 10 = 20$

- **1.** Write and demonstrate with two examples a program for adding two numbers in an 8051 microcontroller. [CO3, CO4]
- **2.** Write and demonstrate with an example a program for finding square root in an 8085 microprocessor. [CO3, CO1]
- **3.** Explain the counters and timers in 8051 microcontroller and subsequent interfacing. [CO4, CO5]
