# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600034 

U.G. DEGREE EXAMINATION - ALLIED

SECOND SEMESTER - APRIL 2022
16/17/18UCA2ALO1 - MICROPROCESSOR - 8085

Date: 27-06-2022
Dept. No. $\square$ Max. : 100 Marks
Time: 01:00 PM - 04:00 PM

## PART A

$(10 * 2=20)$
Answer ALL the questions

1. Define microprocessor.
2. What are the different registers of 8085 microprocessor?
3. Mention the purpose of SID and SOD lines.
4. List any two functions of ALU.
5. Define: T-State.
6. Expand: ALE, LIFO
7. Define register pair.
8. Write the description for: MVI, LDA
9. What is a stack?
10. What is the purpose of a counter?

## PART B

Answer ALL the questions
11 a) Explain the advances in semiconductor technology.
(OR)
b) Describe the history of a microprocessor.

12 a) Discuss the block diagram and architecture of a 8085 microprocessor.
(OR)
b) How will you demultiplex the bus $\mathrm{AD}_{7}-\mathrm{AD}_{0}$ ?

13 a) Explain the read and write cycle of a 8085 microprocessor.
(OR)
b) Explain the I/O read and write cycle of a 8085 microprocessor.

14 a) Discuss the instruction format of a 8085 microprocessor.
(OR)
b) Explain the arithmetic operations with example.

15 a) Describe about Counters.
(OR)
b) Explain about time delays and its types

## PART C

$(2 * 20=40)$
Answer any TWO
16 a) How will you generate control signals? Explain in detail.
b) Draw and explain the pin diagram of a 8085 microprocessor.

17 a) Write an assembly language program to exchange the contents of memory.
b) Explain the Instruction set of a 8085 microprocessor.

18 a) Describe in detail about the applications of microprocessor.
b) Explain in detail about stack and subroutines.

