E-3921

B. C. A. (Part - III) EXAMINATION: 2021

(Old Course)

Paper Third

COMPUTER SYSTEM ARCHITECTURE

(301)

Time: Three Hours [Maximum Marks: 50

Note:-Attempt any two questions from each unit. All questions carry equal marks.

UNIT-1

- 1. Explain Octal and Hexa decimal Number system with examples.
- 2. Explain ASCII, BCD and Grey code.
- 3. Write various Arithmetic operation on Binary numbers.

UNIT -2

- 1. Explain the concept of Logic Gates. Also explain different logic gates along with truth table.
- 2. What is K map? Explain sum of product and product of sum.
- 3. Differentiate between combinational and sequential circuits.

UNIT -3

- 1. Explain Micro processor architecture along with diagram.
- 2. Explain motherboard and SMPS in detail.
- 3. What is system bus? Explain its types with example.

UNIT -4

- 1. Explain various I/O transfer technique.
- 2. Differentiate I/O mapped I/O and memory mapped I/O.
- 3. Explain various data transfer techniques.

UNIT-5

- 1. What is memory hierarchy? Explain with diagram.
- 2. Write short note on semiconductor memory and page replacement a
