



Roll No. 2035 05 105 3

# COMPUTER ORGANISATION

Time: 3 hrs.

### 2K5-DS-02

M.M. 100

- Note:— 1. Part 'A' may be attempted in first 5 pages of Answer Sheet. भाग 'क' के सभी उत्तर, उत्तर-पृस्तिका के प्रथम पांच पृष्ठों में ही करना हैं।
  - 2. Part 'B' in rest of the Sheets of Answer Sheet. भाग 'ख' के उत्तर, उत्तर-पुस्तिका के अगले शेष पृष्टों में लिखिये।
  - 3. Answers may be given in English or Hindi. प्रश्नों के उत्तर अंग्रेजी अथवा हिन्दी में दीजिये।

### PART - 'A'

### Q. 1. Attempt any TEN of the following questions :-

(10X2 = 20)

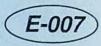
- (1) What are registers?
- (2) What is an instruction?
- (3) What is meant by floating point number?
- (4) What is the use of ALU?
- (5) Define hard wired control unit.
- (6) Give an example of micro-instruction.
- (7) What is virtual memory?
- (8) What is DMA?
- (9) What is polling in CO?
- (10) What is clock in computer?
- (11) What are the features of a stack?
- (12) What is the advantage of a main memory?
- (13) What is I/O processor?
- (14) What is tightly coupled processor?

(5X4 = 20)

# Q. 2. Attempt any FIVE of the following questions:

- 1) Differentiate between RISC and CISC processors.
- 2) How is addition and subtraction of fixed point numbers performed?
- 3) Explain Horizontal and Vertical micro-programed Control Unit.
- 4) What is memory hierarchy? What it is used in computers?
- 5) What is paging? How it is done?
- 6) What is pipelining? Explain in detail.





7) What is daisy chaining concept?

#### PART - 'B'

## Attempt any THREE questions of the following:

(3x20=60)

- Q.3. Explain various addressing modes using suitable examples.
- Q.4. Describe fixed point and floating point number representation using suitable examples. Explain addition and subtraction of floating point numbers.
- Q. 5. What are the micro-instructions? Explain the different types of micros-instructions that can be used in a computer system. Explain parallelism in micro-instructions.
- Q. 6. (a) What are the various address mapping techniques? Explain each using suitable examples.
  - (b) Compare Associative and cache memory.
- Q.7. (a) Compare SISD, SIMD, MISD and MIMD.
  - (b) Describe virtual memory. What are the advantages of it.