ETT

E-007

Roll No. 2035051053

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-पुस्तिका 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 पृष्ठों 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.