MSCCS-08

June - Examination 2016

MSCCS (Final) Examination

Computer Architecture and Micro Processors

Paper - MSCCS-08

Time : 3 Hours]

[Max. Marks :- 100

Note: The question paper is divided into three sections A, B and C. Write answers as per given instructions.

Section - A

 $10 \times 2 = 20$

(Very Short Answer Questions)

- **Note:** Answer **all** questions. As per the nature of the question delimit your answer in one word, one sentence or maximum upto 30 words. Each question carries 2 marks.
- 1) (i) What do you understand by bus in processor?
 - (ii) Define datapath in processor.
 - (iii) What is the stack in computer system?
 - (iv) Define instruction cycle.
 - (v) What do you understand by parallelism?
 - (vi) What is the use of cache memory in computer system?
 - (vii) Define programmed I/O.
 - (viii) What do you understand by assembly language?

- (ix) Define term subroutine in processor.
- (x) What is maximum size of memory that can be addressed by 8085?

Section - B $4 \times 10 = 40$

(Short Answer Questions)

- **Note:** Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 10 marks.
- 2) Explain the cross bar switch with suitable example.
- 3) Describe the fixed point and floating point arithmetic.
- 4) Discuss about the sequential ALU.
- 5) What do you understand by instruction format? Explain.
- 6) Discuss about RISC pipelining.
- 7) What do you understand by hardwired control unit? Explain with suitable diagram.
- 8) What is the importance of cache memory in computer system? How mapping is perform of cache memory?
- 9) Draw and explain the pin out diagram of 8085.

Section - C

(Long Answer Questions)

- **Note:** Answer **any two** questions. You have to delimit your each answer maximum upto 500 words. Each question carries 20 marks.
- 10) What do you understand by interconnect structure? Explain various interconnect structures used in computer system.
- 11) Explain the differences between RISC and CISC architecture.
- 12) Define addressing mode. Explain various addressing modes used in processor.
- 13) Explain the various types of internal memory.