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BF—361—2016

FACULTY OF SCIENCE

B.Sc. (Second Year) (Fourth Semester) EXAMINATION

OCTOBER/NOVEMBER, 2016

COMPUTER SCIENCE

Paper VIII

(ALP Using 8086 Microprocessor)

(MCQ + Theory)

(Wednesday, 30-11-2016) **Time : 2.00 p.m. to 4.00 p.m.**

Time—2 *Hours* *Maximum Marks*—40

N.B. :— (*i*) *All* questions are compulsory.

(*ii*) Figures to the right indicate full marks.

MCQ

1 (*i*) 8086 microprocessor is ..... pin IC.

(A) 8 (B) 16

(C) 40 (D) None of these

(*ii*) 8086 operates on ..... frequency.

(A) 1 MHz (B) 2 MHz

(C) 3 MHz (D) 5 MHz

(*iii*) 8086 microprocessor uses ..... address lines.

(A) 8 (B) 16

(C) 20 (D) none of these

(*iv*) 8086 microprocessor separates in ..... modes.

(A) one (B) two

(C) three (D) all of these

P.T.O.

(*v*) For minimum mode operation MN/$M\overline{X}$ pin is active :

(A) High (B) Low

(C) Both (A) and (B) (D) None of the above

(*vi*) DI stands for ..... in 8086 microprocessor.

(A) Data index register

(B) Destination index register

(C) Both (A) and (B)

(D) None of the above

(*vii*) EU has ..... general purpose registers.

(A) Four (B) Five

(C) Eight (D) All of these

(*viii*) ..... register acts as program counter in 8086.

(A) IP (B) SP

(C) SI (D) DI

(*ix*) In 8086 system memory is divided into ..... segments.

(A) One (B) Two

(C) Three (D) Sixteen

(*x*) Instructions are held in queue for execution in ..... manner.

(A) FIFO (B) LIFO

(C) Both (A) and (B) (D) None of these

Theory

2. Explain the features of 8086 microprocessor. 10

Or

Write short notes on :

(*i*) Explain any *five* data transfer instructions. 5

(*ii*) Explain memory segmentation. 5

3. Explain the architecture of 8086 microprocessor. 10

Or

Write short notes on :

(*i*) Explain bus interface unit 5

(*ii*) Explain execution unit in detail. 5

4. Explain arithmetic group of instructions. 10

Or

Write short notes on :

(*i*) Explain subroutine, call, return. 5

(*ii*) Explain any *four* string instructions. 5