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**V—352—2017**

**FACULTY OF SCIENCE**

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

**NOVEMBER/DECEMBER, 2017**

**COMPUTER SCIENCE**

**Paper VIII**

**(ALP using 8086 Microprocessor)**

**(MCQ + Theory)**

**(Wednesday, 13-12-2017)**

**Time : 2.00 p.m. to 4.00 p.m.**

**Time—2 Hours**

**Maximum Marks—40**

- N.B. :—**
- (i) Attempt *All* questions.
  - (ii) Assume suitable data if necessary.
  - (iii) Figures to the right indicate full marks.
  - (iv) Draw figures wherever necessary.

**MCQ**

**10**

1. Choose the *correct* answer :

- (1) Intel 8086 microprocessor consists of ..... processing units.
  - (A) one
  - (B) four
  - (C) two
  - (D) three
- (2) Intel 8086 microprocessor supports ..... of external memory.
  - (A) 64 KB
  - (B) 1 MB
  - (C) 128 KB
  - (D) 256 KB
- (3) In 8086 microprocessor status register is having ..... status flags.
  - (A) Five
  - (B) Three
  - (C) Nine
  - (D) Six

**P.T.O.**

- (4) In 8086 microprocessor ..... number of segments can access at one time.
- (A) Sixteen (B) Four  
(C) One (D) All of these
- (5) Intel 8086 microprocessor can process ..... data.
- (A) Byte (B) Word  
(C) Double word (D) All of these
- (6) In 8086 ALP linker program produces a run module in file with extension .....
- (A) ASM (B) LST  
(C) EXE (D) MAP
- (7) ..... instruction is not an arithmetic instruction.
- (A) ADD (B) NEG  
(C) AAM (D) XCHG
- (8) In 8086 microprocessor instruction queue is ..... byte long.
- (A) 4 (B) 2  
(C) 6 (D) 8
- (9) In 8086 microprocessor logical address is ..... bit.
- (A) 20 (B) 16  
(C) 8 (D) 24
- (10) In 8086 microprocessor ..... are general purpose registers.
- (A) 4 (B) 6  
(C) 8 (D) 5

### Theory

2. (a) What is Microprocessor ? Explain software model of 8086 micro-processor. 10

Or

- (c) Explain in detail working of Bus Interface Unit. 5
- (d) Explain any *five* arithmetic instructions. 5

3. (a) What is addressing mode ? Explain any *four* addressing modes of intel 8086 microprocessor. 10

Or

(c) Explain any *five* string handling instructions. 5

(d) Explain conditional jump instructions. 5

4. Write short notes on (any *two*) : 10

(a) Data types used in 8086

(b) Repeat ..... until

(c) The mov instruction

(d) Flag control instructions.