

C.U.SHAH UNIVERSITY

Summer Examination-2018

Subject Name: Advanced Micro-Processors

Subject Code: 4TE05AMP1

Branch: B.Tech (CE,IT)

Semester: 5

Date: 31/03/2018

Time: 10:30 To 1:30

Marks: 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

Q-1

Attempt the following questions:

- a) Define: Microprocessor. (01)
- b) Define: Instruction cycle. (01)
- c) Define: Microcontroller. (01)
- d) What is instruction Queue? (01)
- e) What is maskable interrupt? (01)
- f) What is addressing mode? (01)
- g) True/False: 8085 is 1 byte microprocessor. (01)
- h) The size of each segment in 8086 is: (01)
A) 8 KB B) 64 KB C) 64 bit D) 8 bit
- i) The processor 80386/80486 and the Pentium processor uses _____ bits address bus: (01)
A) 16
B) 32
C) 36
D) 64
- j) STA 2000 instruction is how many byte of instruction? (01)
A) 4
B) 2
C) 1
D) 3
- k) The CF is known as _____ (01)
A) carry flag B) condition flag C) common flag D) single flag.
- l) Which is not the control bus signal? (01)
A) Read B) Write C) Reset D) None of these.
- m) How many bits the instruction pointer is wide? A) 16 B) 8 C) 32 D) 64 (01)
- n) In which mode 80386 support memory management and protection mechanism? (01)
A. Direct mode B. indirect mode
C. Protected mode D. Real mode

Attempt any four questions from Q-2 to Q-8

Q-2

Attempt all questions

(14)



- (a) Draw and Explain general segment descriptor format for x86 family processors.
 (b) Write a short note on Descriptor table.
- Q-3 Attempt all questions (14)**
- (a) Draw and Explain Architecture of 8086 Microprocessor.
 (b) Explain different types of instruction of 8085 Microprocessor.
- Q-4 Attempt all questions (14)**
- (a) Explain Real Address Mode and Protected Virtual Address Mode of 80286 MP.
 (b) Draw and Explain Register set of 80386 Microprocessor.
- Q-5 Attempt all questions (14)**
- (a) Explain following instruction: LEA, HLT, MOV, XCHG, NEG, RCL,CMP
 (b) Write a short note on Memory bank.
- Q-6 Attempt all questions (07)**
- (a) Explain various addressing modes of 8086 Microprocessor. (07)
 (b) Explain segmentation in 8086 Microprocessor (05)
 (c) Differentiate 8 bit and 16 bit Microprocessor. (02)
- Q-7 Attempt all questions (14)**
- (a) Draw pin diagram of 8085 Microprocessor and explain Interrupt related pin.
 (b) What is Gate? Explain general Gate Descriptor format.
- Q-8 Attempt all questions (7)**
- (a) Explain Demultiplexing process of AD7- AD0 bus system in 8085 (7)
 Microprocessor.
 (b) Enlist and explain features of Pentium MMX processor.. (5)
 (c) Differentiate between RISC and CISC. (2)

