

Agnel Charities'
Fr. C. Rodrigues Institute of Technology, Vashi

22|4|22

Prelim Examination FH-2022

Branch: Comp SE Sem-IV	Time 3-hours
Subject: CSC405 -MP	Max. Marks: 80

- Q1** Choose the correct option for following questions. All the Questions carry equal marks. (2 Marks each) Total Marks - 20
1. Trap Flag (TF) is used to _____
 Option A: Enable the hardware interrupt called TRAP
 Option B: Change direction for string instructions
 Option C: Avoid over-heating of the motherboard
 Option D: Debug using single stepping
2. What is aligned data?
 Option A: Any 16-bit data
 Option B: 16-bit data starting from odd address
 Option C: 16-bit data starting from even address
 Option D: 16-bit data having even parity
3. 8086 works in minimum mode, when MN/MX' =
 Option A: 0
 Option B: 1
 Option C: GND
 Option D: None of the above
4. When RD' signal is active low, then
 Option A: Data is coming from memory
 Option B: Data is coming from microprocessor
 Option C: Data is in execution state
 Option D: None of the above
5. INT 3 is _____ interrupt
 Option A: Breakpoint
 Option B: Overflow
 Option C: Divide error
 Option D: NMI
6. In which addressing mode we give the offset address of the operand?
 Option A: Immediate addressing mode
 Option B: Register addressing mode
 Option C: Direct addressing mode.
 Option D: Indirect addressing mode
7. LEA BX, SUM; BX will get the _____
 Option A: Physical address of SUM
 Option B: Offset address of SUM
 Option C: SUM of BX and SI
 Option D: LEAST of BX and SUM

Agnel Charities'
Fr. C. Rodrigues Institute of Technology, Vashi

Prelim Examination FH-2022

of 8086

- 8** The size of RAM is _____
Option A: 16 Bytes
Option B: 256 Bytes
Option C: 1 KB
Option D: 1 MB

- 9** MOV CL, 04H[BX] is an example of _____
Option A: Register Relative Addressing Mode
Option B: Base Indexed Addressing Mode
Option C: Base Relative plus Indexed Addressing Mode
Option D: Indirect Addressing Mode

- 10** 8086 has two memory banks because _____
Option A: If one fails, other will work
Option B: To reduce load on one chip
Option C: To transfer 16-bit data in one cycle
Option D: One for fetching, one for execution

Q-2 Attempt ANY TWO QUESTIONS out of THREE Each question is for 10 marks

- A** Design an 8086 Microprocessor in Minimum Mode system working at 6 MHz having the following
• 32kb EPROM using 16KB chips; 128kb RAM using 32kb chip.
- B** Draw and explain block diagram of Pentium Processor.
- C** Compare features and characteristics of various processors.

Q-3 Attempt ANY TWO QUESTIONS out of THREE Each question is for 10 marks

- A** Draw and explain the interfacing diagram of 8259 Programmable Interrupt Controller with 8086 in singe mode
- B** Explain real, protected mode of 80386 microprocessor.
- C** Draw and explain EFLAG register format of 80386.

Q-4 Attempt ANY TWO QUESTIONS out of THREE Each question is for 10 marks

- A** Draw and explain the architecture of 8255 PPI.
- B** Explain 80386 Architecture with neat diagram
- C** Explain branch prediction logic and MESI model used in Pentium Processor