F.Y.B.Sc (IT)-Sem II - A.T. K.T. Exam - Sept 22

MALINI KISHOR SANGHVI COLLEGE OF COMMERCE AND ECONOMICS F.Y.B.Sc IT SEM II MICROPROCESSOR ARCHITECTURE

SSIMONOSSI

TIME: 2 1/2 HOURS

DATE: 22/09/2022

MARKS: 75

N.B: ALL QUESTIONS ARE COMPUSORY

FIGURES TO THE RIGHT INDICATE FULL MARKS.

Q.1 ANSWER THE FOLLOWING (ANY THREE):

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- A) Explain the architecture of microprocessor
- B) Describe the application of microcontrollers
- C) Interface 2 K ROM and 1 K RAM with 8085 microprocessor
- D) Interface 8 K ROM and 8 K RAM with 8085 microprocessor
- E) Explain the interfacing of 8155
- F) Explain the process of trouble shooting memory interfacing circuits

Q.2 ANSWER THE FOLLOWING (ANY THREE):

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- A) Explain the process of testing I/O interfacing circuits
- B) Explain the concept of memory mapped IO.
- C) Write an 8085 assembly level program to subtract two numbers stored at C030 and C031 Store the result from C032.
- D) Write an 8085 assembly level program to divide two numbers stored at C030 and C031. Store the result from C032.
- E) Describe the various types of arithmetic instructions.
- F) Describe branch instructions

Q.3 ANSWER THE FOLLOWING (ANY THREE):

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- A) Describe the arithmetic instruction of 8085 with examples
- B) Describe the logical OR instructions of 8085 with examples
- C) Describe the rotate instructions of 8085 with examples
- D) Write an assembly level program to design modulo 10 Counter
- E) Describe the concept of subroutines
- F) Describe the conditional return instructions.

Q.4 WRITE SHORT NOTES ON (ANY THREE):

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- A) Binary to seven segment LED conversion
- B) Binary to ASCII conversion
- C) BCD addition
- D) Operating system
- E) Assemblers
- F) Interrupts in 8085

Q.5 WRITE SHORT NOTES ON (ANY THREE):

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- A) Pentium pro processor
- B) Pentium II processors
- C) i3 processor
- D) i5 processor
- E) i7 processor
- F) Instruction format of SUN SPARC microprocessor