QUEST FOR EXCELLENCE

G. S. Mandal's

MARATHWADA INSTITUTE OF TECHNOLOGY

Approved by All India Council for Technical Education (AICTE), Delhi

Affiliated to Dr. Babasaheb Ambedkar Marathwada Universtiy, Aurangabad.

Department of Electronics and Telecommunication Engineering

Class- TE A **2017-18 Part-2**

Subject: Microcontroller & Advanced Processors

Question Bank Unit 1

S.No.	1 MARK QUESTIONS
1.	Explain Trap Flag in 8086
2.	Explain Interrupt Flag
3.	Explain Ready Signal in 8086 Pin configuration.
4.	Explain DEN Signal in 8086 Pin configuration.
	2 Marks Questions
1.	Explain Direction Flag
2.	Give details of HOLD and HLDA Signals in 8086 Pin configuration.
3.	With an example, demonstrate how a physical address is formed in 8086.
4.	What is queuing of instructions ?(Concept of Pipelining and its importance)
	6 Marks Questions
1.	Describe Register Organization of 8086.
2.	Draw and Explain 8086 architecture.
3.	Explain Pin Diagram of 8086.
4.	Explain memory segmentation in 8086.
5.	Stack of 8086
6.	Different Interrupts associated with8086
7.	Flag register of 8086.

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Question Bank Unit 2

S.No.	1 MARK QUESTIONS
1.	Explain LEA instruction
2.	Explain SBB instruction
3.	Explain CBW instruction
4.	Explain CWD instruction
	2 Marks Questions
1.	Explain SHL and SAL instructions with example.
2.	Explain DB and DW directives with example.
3.	Explain MOVSB/MOVSW instructions in details.
4.	Explain the following Instructions: • TEST • SAR • JCXZ • IDIV • NEG • MUL • DAA • PUSH & POP
	6 Marks Questions
1.	Explain addressing modes of Sequential control flow instructions in 8086
2.	Arithmetic instructions of 8086.
3.	Explain addressing modes of control transfer instructions in 8086.
4.	Explain the different assembler directives .
5.	Write a program for addition of two numbers
6.	Write a program for multiplication of two numbers
7.	Conditional Jump Instructions.

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Question Bank Unit 3

S.No.	1 MARK QUESTIONS
1.	Define Step Angle?
2.	Write the formula for step Angle.
	6 Marks Questions
1.	Explain Memory interfacing
2.	Stepper Motor interfacing
3.	8255 interfacing with example to interface ADC
4.	D/A interfacing with 8086
5.	Write an ALP program to rotate a stepper motor clockwise and anticlockwise
6.	Write an ALP program to multiply and divide 8bit and 16 bit nos.
7.	Write an ALP program to add and subtract 8bit and 16 bit nos.

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Question Bank Unit 4

S.No.	2 MARK QUESTIONS
1.	Compare 80286,80386,80486
2.	Specifications of 80286,80386,80486
	6 Marks Questions
1.	Explain in detail features of 80286.
2.	Explain in detail features of 80386.
3.	Explain in detail features of 80486.
4.	Explain in detail features of Pentium.
5.	Explain protected Virtual addressing modes of 8086.

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QUEST FOR EXCELLENCE

Class- TE A&B **2017-18 Part-2**

Subject: Microcontroller & Advanced Processors

Question Bank Unit 5

S.No.	1 MARK QUESTIONS
1.	Explain DB directive.
2.	Explain ORG directive.
3.	Explain PUSH and POP instruction
	2 Marks Questions
1.	Explain PSW of 8051.
2.	What are the two types of external hardware interrupts in 8051
	What is difference between LJMP and SJMP instructions.
3.	Explain TMOD register
4.	Role of VEE pin in 8051
	6 Marks Questions
1.	Draw and explain block diagram of 8051.
2.	Explain interrupt vector table of 8051
3.	Difference between Microprocessors and Microcontrollers?
4.	SFR's of 8051.
5.	Specifications of 8051.
6.	Bit related Instructions of 8051.
7.	Code Memory and external data memory related instructions.

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Subject: Microcontroller & Advanced Processors

Question Bank Unit 6

SNo	1 MARK QUESTIONS
1.	What is role of VEE pin in LCD?
2.	What are the common baud rates used for serial communication?
3.	Explain SUBB instruction
	2 Marks Questions
1.	Explain Direction Flag
2.	Explain MUL AB instruction.
3.	How the period of machine cycle if crystal frequency is 11.0592 MHz
4.	Explain PSW of 8051
5.	Explain DIV AB instruction
	6 Marks Questions
1.	Explain interfacing of LED with 8051.
2.	Explain memory organization of 8051
3.	Write a program to multiply 25 by 10 using the technique of repeated addition.
4.	Explain TMOD register in detail
5.	Explain TMOD register in detail
6.	Explain Interrupt vector table of 8051.
7.	Write a program for interfacing of LED, Stepper Motor,ADC &DAC