



KINGS

COLLEGE OF ENGINEERING



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

QUESTION BANK

SUBJECT CODE : EC1303 **SEM / YEAR** : V / III

SUBJECT NAME : MICROPROCESSORS AND ITS APPLICATIONS

UNIT I – 8085 CPU

PART - A

I. TWO MARK QUESTIONS:

1. What are EI & DI instructions of 8085?
2. What is ALE?
3. Define stack.
4. What do you mean by input port & output port?
5. List the flags of 8085.

PART - B

II. SIXTEEN MARK QUESTIONS:

1. Draw the functional block diagram of 8085, and explain in brief. (16)
2. What are the different addressing modes used in 8085. Explain with an example. (16)
3. Discuss the interrupt system in 8085. (16)
4. What are the memories mapped I/O, I/O mapped & I/O explain. (16)
5. Draw the timing diagram for IN & OUT instructions of 8085. (16)

UNIT II – PERIPHERALS INTERFACING

PART - A

I. TWO MARK QUESTIONS:

1. What are the types of serial data communication?
2. What is baud rate?

3. What is USART?
4. What are the two command words of 8059?
5. What are the features of 8279?

PART - B

II. SIXTEEN MARK QUESTIONS:

1. With neat diagram, describe the operation 8279 programmable keyboard display interface. (16)
2. Explain the control word format of 8255A for I/O mode with its diagram. (16)
3. Draw the block diagram of Intel 8255. Mention the operating modes. (16)
4. Discuss the organization & architecture of 8251A (USART) with a functional block diagram. (16)

UNIT III – 8086 CPU

PART - A

I. TWO MARK QUESTIONS:

1. What is addressing?
2. What are the modes in which 8086 can operate?
3. List the segment registers of 8085.
4. How I/O ports are addressed in 8086.
5. What is NMI?

PART - B

II. SIXTEEN MARK QUESTIONS:

1. Draw the architectural block diagram of 8086. (16)
2. Explain with examples addressing modes of 8086 processor. (16)
3. Explain the interrupt structure of 8086 processor. (16)
4. Draw & explain the modes of operation of 8086. (16)
5. Explain the instruction set of 8086 with examples. (16)

UNIT IV – 8051 MICRO CONTROLLER

PART - A

I. TWO MARK QUESTIONS:

1. What is Micro controller?
2. What is the difference between microprocessor & micro controller?
3. What are the features of ROM & RAM in 8051 micro controller?

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4. Explain the instructions used to access external RAM.
 5. List the applications of microcontroller?

PART - B

II. SIXTEEN MARK QUESTIONS:

1. Draw and Explain the block diagram of 8051. (16)
2. Explain the memory structure of 8051 (16)
3. Explain interrupt structure of 8051. (16)
4. Explain the I/O port structure of 8051. (16)
5. Draw the pin configuration of 8051, Explain each pin. (16)

UNIT V – 8051 PROGRAMMING AND APPLICATIONS

PART - A

I. TWO MARK QUESTIONS:

1. What is the use of DA instruction in 8051?
2. What is the function of program counter in 8051?
3. What is the job of the TMOD register?
4. Name any four conditional jump instructions of 8051.
5. Explain the bit level logical instructions of 8051.

PART - B

II. SIXTEEN MARK QUESTIONS:

1. List the instruction set of 8051, microcontroller that affect the flag bits. (16)
2. How 8051 micro controller can be interfaced with external ROM, Explain with Examples. (16)
3. Explain the matrix keyboard interface of 8051. (16)
4. Draw the format of SCON register. Explain different bits in it. (16)
5. Write an assembly language program to find "Fibonacci Series" of "N" given term. (16)
6. Write an assembly language program for stepper motor control. (16)
