

Printed pages: 01

Paper Id:

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Sub Code: NEE504

Roll No:

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B TECH

(SEM V) THEORY EXAMINATION 2017-18
MICROPROCESSOR & ITS APPLICATIONS

Time: 3 Hours

Total Marks: 100

Notes: Attempt all Sections. Assume any missing data.

SECTION -A

1. Attempt all question in brief: (2x10=20)
- Write about the basic difference between microprocessor and microcontroller.
 - What are interfacing logical devices?
 - Define following: (i)Nibble(ii)word
 - Define following:(i) Mnemonics(ii)Program
 - Write basic operations of microprocessor with block diagram.
 - Write about different languages of digital computer.
 - Define compiler or interpreter in programming languages.
 - Explain different types of interrupts in 8085.
 - Draw flag register of 8085.
 - Write about types of addressing modes in 8086

SECTION -B

2. Attempt any **three** parts of the following: (10x3=30)
- Explain Minimum Mode operation of 8086 microprocessor with block diagram.
 - Compare Procedure & Macros in assembler directives of 8086.
 - Explain the following instructions of 8085 microprocessors
 - POP PSW
 - XTHL
 - SPHL
 - PUSH PSW
 - CMP M
 - Give the features and functional block diagram of 8237 DMA controller.
 - Explain the internal architecture of 8255.

SECTION -C

3. Attempt any **one** parts of the following: (10x1=10)
- Explain evolution of microprocessor with its different generation. What do you mean by Addressing mode, explain Different addressing mode used in 8085 with suitable example.
 - Draw architecture of 8086 explain its different unit. What do you mean by pipelining and explain the concept of memory segmentation.
4. Attempt any **one** parts of the following: (10x1=10)
- Explain assembler level programming and draw the flowchart of assembler level programming?
 - Explain following:
 - 8259 Programmable interrupt controller.
 - Development tools: Editor, Library builder, Linker, Emulator.
5. Attempt any **one** parts of the following: (10x1=10)
- Explain different MODES OF OPERATION of 8259.
 - Explain minimum and maximum operating modes of 8086 with timing diagram
6. Attempt any **one** parts of the following: (10x1=10)
- Draw and explain block diagram and pin configuration of IC-8253.
 - Write an assembly level program to find square root of given number
7. Attempt any **one** parts of the following: (10x1=10)
- Explain the interrupts sequence and types of interrupt in 8086.
 - Draw explains the memory and I/O read cycle of 8085.