

BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - III Computer Science & Engineering AI & ML : WINTER : 2024
SUBJECT: COMPUTER ORGANIZATION & MICROPROCESSOR

Day : Monday
Date : 09/12/2024

W-23938-2024

Time : 10:00 AM-01:00 PM
Max. Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Assume suitable data **WHEREVER** necessary.
- 4) Draw neat labeled diagrams **WHEREVER** necessary.

Q.1 Describe EU of 8086 with neat diagram. (10)

OR

Q.1 Describe the following addressing modes of 8086 with suitable example (10)

- a) Register addressing mode
- b) Immediate addressing mode
- c) Direct addressing mode
- e) Indirect addressing mode

Q.2 Explain the restoring method of division with algorithm and also divide using restoring division 7 by 3. (10)

OR

Q.2 Show IEEE 754 standards for binary Floating Point Representation for 32 bit single format and 64 bit double format (10)

Q.3 State the function of Control unit and explain in detail Delay element and a Sequence Counter Method. (10)

OR

Q.3 Explain Microprogrammed Control unit with neat diagram. (10)

Q.4 Explain in detail Memory Hierarchy and Memory Interleaving with Example. (10)

OR

Q.4 What are the features of Cache Memory Design? (10)

Q.5 Explain interrupt driven I/O and DMA with neat diagram. (10)

OR

Q.5 Write a short note on (10)

- a) SCSI
- b) USB

Q.6 Explain different types of Pipeline Hazards. (10)

OR

Q.6 Describe Flynn's classification for parallel processors with neat diagram. (10)

* * * * *