Question Bank (I scheme)

Name of Subject: Digital Techniques and Microprocessor (DTM) **Unit Test: II**
Subject code: 22323 **Course: IF**
Semester: III

CHAPTER-3 Sequential Logic Circuits (Marks -12)

Marks 2
1. What is Race Around condition? (CO3)
2. List Applications of D-Flip Flop. (CO3)

Marks 4
3. Draw circuit of J-K Flip Flop using NAND gate and describe its working. (CO3)
4. Draw symbol and truth table of T Flip Flop (CO3)

CHAPTER-4 Microprocessor: 8086 and Modern Microprocessor. (Marks -12)

Marks 2
1. List any 4 features of 8086 microprocessor. (CO4)
2. List all the signals of 8086 in Minimum Mode. (CO4)
3. List all the signals of 8086 in Maximum Mode. (CO4)
4. Explain concept and advantages of pipelining. (CO4)
5. Write any four characteristics of RISC computer. (CO4)

Marks 4
1. Draw architecture of 8086 and describe in detail. (CO4)
2. Draw the flag register structure of 8086 and describe in the operation of each flag. (CO4)
4. Explain the minimum mode configuration of 8086 microprocessor. (CO4)
5. Explain the maximum mode configuration of 8086 microprocessor. (CO4)
6. Describe memory segmentation in 8086. (CO4)

CHAPTER-5 Assembly Language Programming using 8086 (Marks - 16)

Marks 2

1. List program development tools.(CO5)

2. What is Algorithm (CO5)

3. State the function of Editor.(CO5)
4. State the function of Assembler.(CO5)

5. Explain Debugger.(CO5)
6. List any four assembler directives. (CO5)
7. List Instruction format of 8086 and explain any one of them. (CO5)

Marks 4

1. Describe various addressing modes of 8086 with one suitable example. (CO5)
2. Explain stack related instructions of 8086 microprocessor with example. (CO5)
3. Explain any 4 Arithmetic instructions of 8086 with example. (CO5)
4. Explain any 4 logical instructions of 8086 with example. (CO5)
5. Explain any 4 string instructions of 8086 with example. (CO5)
6. Write an algorithm, flowchart and ALP to perform 16-bit addition. (CO5)
7. Write an algorithm, flowchart and ALP to multiply two 8 bit and16 bit numbers. (CO5)
8. Write an algorithm, flowchart and ALP to find smallest and largest number from array of n numbers. (CO5)
9. Write an algorithm, flowchart and ALP to perform block transfer from one memory location to another. (CO5)