

B.Sc.-II (CBCS Pattern) Semester - III
USELT06 - Electronics Paper-II : Microprocessor

P. Pages : 2

Time : Three Hours



GUG/S/23/11605

Max. Marks : 50

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- Notes : 1. All questions are compulsory and carry equal marks.
2. Draw neat and well labelled diagram wherever necessary.

1. a) Explain the following terms of 8085 microprocessor. 5
i) Data and address bus
ii) Arithmetic and logic units (ALU).

- b) Explain the function of program counter and stack pointer register. 5

OR

- c) What is flags in 8085 μ p ? Explain the various flags of 8085 μ p . 5

- d) Explain the role of ALE and HOLD pins of 8085 μ p . 5

2. a) Explain the followings with example. 5

i) Direct Addressing Mode.

ii) Indirect Addressing Mode.

- b) Explain the following instructions with suitable example. 5

i) MOV R1, R2

ii) MVI R1, Data

iii) XRI 8 - bit

v) CMA.

OR

- c) What is flowchart? Explain the function of various symbol of flowchart. 5

- d) What is Stack? Explain its operation. 5

3. a) Write the assembly language program for addition of two 8 - bit number and store the result in memory location also draw flowchart for it. 5

- b) Explain the role of subroutine in programming. 5

OR

- c) Explain the timing diagram of MOV instruction. 5

- d) Explain: 5

i) Hardware interrupt.

ii) Software interrupt.

4. a) Differentiate between 8085 and 8086 microprocessor. 5
b) Explain the function of queue in 8086 microprocessor. 5

OR

- c) Explain the various flags of 8086 microprocessor. 5
d) Explain the minimum mode of 8086 microprocessor. 5
5. Solve **any ten** of the followings: 1x10

- a) Differentiate between RAM & ROM
b) Write the feature of 8086 microprocessor.
c) What is interrupt in 8085 microprocessor?
d) What is addressing modes?
e) What is subroutine?
f) What is register addressing mode?
g) What is delay loop in programming?
h) Specify the memory location and its content after the execution of following program.
MVI, B, F7H
MOV A, B
STA 6050
HLT
i) What is machine cycle?
j) State the feature of 8086 microprocessor.
k) What is Directives?
l) State the function of MN/MX pin of 8086 microprocessor.
