

- Q.31 Compare 80386 and 80486 microprocessors
  - Q.32 Write a short note on Pentium microprocessor
  - Q.33 Explain microprocessor-based weighing scale in brief.
  - Q.34 How microcontroller is used in washing machines?
  - Q.35 Discuss the pipelining used in 8086 microprocessors

## **SECTION-D**

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Draw the block diagram of 8086 and explain it

Q.37 Draw the block diagram of 8051 microcontroller and explain it

Q.38 Explain the application of microprocessor in temperature measurement.

No. of Printed Pages : 4

Roll No. ....

105952/31054A/1064N

/031552B/30863

**5th Sem / Branch : Power Electronics**

## **Subject:- Advanced Microprocessors**

Time : 3Hrs.

M.M. : 100

## **SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 The width of address bus of 8086 is:

  - a) 8
  - b) 16
  - c) 20
  - d) 18

Q.2 Which of the following operations are used in stack segment

  - a) Push
  - b) Pop
  - c) Add
  - d) Both (a) & (b)

Q.3 Which signal is used to demultiplex address/data bus

  - a) ALE
  - b) CLK
  - c) READY
  - d) VCC

Q.4 In 8086, one bus cycle consist of \_\_\_\_\_ T states.

  - a) 2T
  - b) 4T
  - c) 8T
  - d) 16T

Q.5 8051 is pin IC

(600)

(4) 105952/31054A/1064N  
/031552B/30863

(1) 105952/31054A/1064N  
/031552B/30863

- a) 20                    b) 30  
c) 40                    d) 25
- Q.6 8086 can access up to \_\_\_\_\_ memory  
a) 512 KB              b) 1 MB  
c) 2 MB                d) 256 KB
- Q.7 One byte is equal to \_\_\_\_\_ bits  
a) 8                    b) 4  
c) 16                  d) 32
- Q.8 80486 is a \_\_\_\_\_ bit microprocessor  
a) 8                    b) 16  
c) 32                  d) 128
- Q.9 Which instruction is used for placing data on the stack  
a) POP                b) PUSH  
c) PUSHAD             d) All of the above
- Q.10 In the instruction the OP code decides \_\_\_\_\_  
a) What to do        b) Where to do  
c) Both A and B      d) None

### SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 8086 is a \_\_\_\_\_ pin IC.

(2) 105952/31054A/1064N  
/031552B/30863

- Q.12 Write one application of 8051 microcontroller  
Q.13 Write one logical instruction.  
Q.14 What is I.S.S?  
Q.15 Define an instruction  
Q.16 Define Program  
Q.17 What is the function of ALU?  
Q.18 Expand B.I.U?  
Q.19 Define Instruction cycle.  
Q.20 Expand N.M.I

### SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Discuss concept of memory segmentation of 8086.  
Q.22 Draw the pin diagram of 8086  
Q.23 Explain different system buses of 8086  
Q.24 Explain clock circuitry of 8086  
Q.25 What is math coprocessor?  
Q.26 Explain the instruction format of 8086  
Q.27 Discuss the data transfer in 8086 in brief.  
Q.28 Write a program to add two 16-bit numbers.  
Q.29 Discuss the use of interrupts in 8086  
Q.30 Write main features of 8051

(3) 105952/31054A/1064N  
/031552B/30863