SEAT No._____ No. of Printed Pages : 2

[62]

SARDARPATEL UNIVERSITY V.V.NAGAR

T.Y.B.Sc. Sem-VI EXAMINATION

SUB. CODE:-US06CELE02 Digital Systems II

DATE:-27/03/2019, Wednesday TIME:-10:00 am to 01:00 pm MARKS-70

Q-1 Choose correct answer **[10]**

1. V/F type A/D converter_____ is changing.
   (A) Time (C) Frequency.
   (B) Phase (D) None of these
2. V/T type A/D converter_____ is constant.
   (A) Time (C) Frequency.
   (B) Phase (D) None of these
3. Flash/Comparator type A/D converter is _____ converter.
   (A) Fastest (C) Medium
   (B) Slowest (D) None of these
4. D/A converter is part of _____ converter,
   (A) A/D (C)D/A
   (B) A/F (D) None of these
5. Tristate switch has Low, High and _____ state.
   (A) Floating (C) short circuit
   (B) open (D) None of these
6. In Bipolar ROM before programming all data are _____.
   (A) 1 (C) 0
   (B) blanks (D) None of these
7. In static Bipolar RAM 0 & 1 are sensed by presence of _____.
   (A) Current (C) Voltage
   (B) Resistor (D) None of these
8. The control input CS stands for _____.
   (A) Chip select (C) chip stop
   (B) chip chops (D) None of these
9. BJT memory is _____ then MOS memory,
   (A) Faster (C) Slower
   (B) Not working (D) None of these
10. An IC ADC 0801 has _____ bit output.
    (A) Three (C) Eight
    (B) Four (D) None of these

Q-2 Short answer type question. (any ten) **[20]**

1. Explain what do you understand by program memory.
2. Explain what do you understand by data memory.
3. Give classification of Read and Write memories drawing diagram.
4. Draw a figure of single transistor dynamic memory cell.
5. Explain Address Multiplexing.
6. Draw the diagram of static bipolar (TTL) RAM cell.
7. Draw the circuit of weighted resistor type DAC.
8. Draw the o/p waveforms of counter type ADC.
9. List the parameters of DAC & Explain any one in brief.
10. Draw the circuit of 3 bit flash type A/D converter.
11. List A/D converter specifications , and explain any one in brief.
12. List different types of A/D converter.

[P.T.O]

Q.3	Write a note on RAM,ROM & PROM.	[10]
	OR	
Q.3	Give an account ROM organization also draw ROM bock diagram and explain it.	[10]
Q.4	Give an account of Programmable read only memory.	[10]
	OR	
Q.4	Give an account of Tristate-Switch.	[10]
Q.5	Draw the circuit of R-2R ladder type DAC, explain its working in detail.	[10]
	OR	
Q.5	Give and account of counter type A/D converter.	[10]
Q.6	Give an account of V/F type A/D converter.	[10]
	OR	
Q.6	Give an account of V/T type A/D converter.	[10]