

## TEST-3 (DIGITAL ELECTRONICS)-(ELECTRONIC)

- Q.1 The flip-flop circuit is.....  
 a) Unstable                      b) multistable  
 c) Monostable                    d) bitable
- Q.2 A digital counter consists of a group of  
 a) Flip-flop  
 b) half adders  
 c) Full adders  
 d) None of the above
- Q.3 RAM memory represents .....memory.  
 a) Record- attenuated  
 b) Read- audio  
 c) Radio-amplifies  
 d) Random-access
- Q.4 ROM memory represents .....memory  
 a) Read-out                      b) Record- oscillation  
 c) Register open                d) Read- octave
- Q.5 A temporary memory is destroyed .....  
 a) When power is switched off  
 b) In few milliseconds  
 c) In few seconds  
 d) In few minutes
- Q.6 ..... is a permanent memory.  
 a) ROM only  
 b) RAM only  
 c) Both 'a' and 'b'  
 d) Either 'a' and 'b'
- Q.7 .....is a volatile memory.  
 a) ROM  
 b) RAM  
 c) Either 'a' and 'b'  
 d) Both 'a' and 'b'
- Q.8 LCD display represents  
 a) Light decoding device  
 b) Liquid crystal display  
 c) Lead cascade demonstrator  
 d) Linear digital demonstrator
- Q.9 LED display represents.  
 a) Loop emitter decoder  
 b) Long emission die  
 c) Light emitting diode  
 d) Logic electrostatic diode
- Q.10 For LCD display which of the following liquid crystals is used?  
 a) Aqua regia                    b) Nematic fluid  
 c) Liquid boron                 d) Mercury
- Q.11 ..... needs D.C. forward voltage to emit light.  
 a) LCD                              b) LED  
 c) both a and b                 d) None of the above
- Q.12 A digital voltmeter has..... Input and ..... Output  
 a) Digital, digital                b) digital, analog  
 c) Analog, analog                d) analog, digital
- Q.13 ..... Display consumer least amount of power.  
 a) LED  
 b) LCD  
 c) Fluorescent display  
 d) All displays consumes same power
- Q.14 Which of the following memories has both read and write capabilities?  
 a) ROM only  
 b) RAM only  
 c) Both 'a' and 'b'  
 d) None of the above
- Q.15 A 4-bit counter with four flip-flops will count up to decimal.  
 a) 8                                    b) 15





- Q.51 The memory element antimagnetic film memory consists of  
 a) Doped aluminum  
 b) Plated wires  
 c) nickel Iron alloy  
 d) Superconductive material
- Q.52 To solve differential equations numerically which of the following methods is used?  
 a) Newton-Raphson method  
 b) Gauss-elimination method  
 c) Runga-Kutta method  
 d) Any of the above
- Q.53 .... Is used for storing binary information  
 a) A latch                      b) A register  
 b) A flip-flop                d) All of the above
- Q.54 BCD expresses each decimal digit as  
 a) a byte                      b) a string of bits  
 c) a string of 4 bits        d) a string of 2 bits
- Q.55 The output states in sequential circuits are functions of  
 a) present and past input  
 b) presents input states  
 c) past input states  
 d) none of the above
- Q.56 When a binary adder is used as BCD adder, the sum is correct when it is  
 a) Less than 9    b) greater than 9  
 c) less than 16  
 d) none of the above
- Q.57 During instructions execution read cycle is always followed by  
 a) delete signal            b) read cycle  
 c) write cycle                d) none of the above
- Q.58 Schmitt trigger can be used as a  
 a) Flip-flop  
 b) Comparator  
 c) Square—wave generator  
 d) all of the above
- Q.59 For digital ICs the most widely used 'Bipolar Technology' is  
 a) ECL  
 b) DTL  
 c) TTL  
 d) None of the above
- Q.60 ..... circuit can be used as parallel to-series converter  
 a) Multiplexer                b) Digital counter  
 c) Decoder                    d) De- multiplexer
- Q.61 A half adder has which of the following?  
 a) Two inputs and two outputs  
 b) Three inputs and two outputs  
 c) Two inputs and one output  
 d) One input and one output
- Q.62 ..... Flip-flop does not have race problem.  
 a) D                              b) T  
 c) JK                             d) Master-slave
- Q.63 A ring counter is same as  
 a) A NAND gate              b) An AND gate  
 c) A NOR gate                d) An inverter
- Q.64 The Schmitt trigger, for a sinusoidal input, gives output as  
 a) Sinusoidal itself        b) square wave  
 c) Saw tooth                 d) None of the above
- Q.65 ..... error can be usually deleted by a parity check.  
 a) One-bit                      b) Double-bit  
 c) Three-bit                    d) Any-bit
- Q.66 BCD number are obtained by  
 a) Converting binary to decimal  
 b) Each decimal digit is represented by a four bit binary  
 c) Converting decimal number to binary  
 d) Converting decimal to octal numbers
- Q.67 A BYTE stands for a string of ..... BITS.  
 a) Two                         b) four  
 c) Eight                        d) twelve
- Q.68 ..... is an unweighted code  
 a) 63210                      b) 2421  
 c) 8421                        d) Excess-3code
- Q.69 Semiconductor memories are

- a) non-volatile, small size'
- b) Volatile, small size
- c) volatile
- d) Non-volatile

Q.70 Due to which of the following reasons a NAND gate is called a universal logic element/

- a) Many digital computers use NAND gates
- b) All the minimizing techniques are applicable for optimum NAND gate realization
- c) Any logic function can be realized by NAND gate alone
- d) All of the above

Q.71 K- map method of simplification can only be applied when the given functions is in

- a) Canonical form
- b) Product of sum form
- c) Sum of product form
- d) Any of the above form

Q.72 In which of the following the power dissipation is the lowest?

- a) ECL
- b) MOS
- c) TTL
- d) None of the above

Q.73 Which of the following are the most widely used universal gates?

- a) NAND and OR gates
- b) NOR and AND gates
- c) OR and AND gates
- d) NOR and NAND gates

Q.74 As compared to analog computers, digital computers are more widely used because they are

- a) Easier to maintain
- b) Useful over wider ranges of problem types
- c) Less expensive
- d) Always more accurate & faster

Q.75 In a full adder, there are

- a) Three binary digit inputs and three binary digit output
- b) Three binary digit inputs and binary outputs

- c) two binary number inputs and two outputs
- d) none of the above

Q.76 Generally..... flip-flops are used in shift registers.

- a) D
- b) T
- c) SR
- d) JK

Q.77 In octal system the value of  $2^5$  is

- a) 20
- b) 40
- c) 200
- d) 400

Q.78 Which of the following circuits exhibits memory?

- a) Ex. OR gate
- b) NAND gate
- c) Astable multivibrator
- d) Bistable multivibrator

Q.79 A simple flip-flop is a ..... Bit storage cell.

- a) One
- b) tow
- c) Three
- d) four

Q.80 An AND gate is a ..... circuit.

- a) Relaxation
- b) memory
- c) Sequential
- d) combinational