

TEST-2 (DIGITAL ELECTRONICS)-(ELECTRONIC)

- Q.1can provide a digital signal.
- a) Variable resistor
 - b) Slow turning of a potentiometer
 - c) A cosine wave
 - d) A square wave
- Q.2 The digital systems usually operate on.....
- a) hexadecimal system
 - b) octal system
 - c) binary system
 - d) decimal system
- Q.3 Which of the following statements is correct regarding a pure sine wave?
- a) It is a digital signal
 - b) It is a digital signal at higher frequencies
 - c) It is an analog signal
 - d) It is neither nor analog signal
- Q.4 Boolean algebra is essentially based on.....
- a) numbers
 - b) truth
 - c) logic
 - d) symbols
- Q.5 In a digital signal the number of levels is
- a) two
 - b) four
 - c) six
 - d) ten
- Q.6 The binary system uses powers offor positional values.
- a) 2
 - b) 4
 - c) 6
 - d) 8
- Q.7 In binary numbers, shifting the binary point the one place to the right
- a) multiplies by 2
 - b) multiplies 4
 - c) divides by 4
 - d) increase by 2
- Q.8 Binary 111 represent's
- a) decimal 4
 - b) decimal 7
 - c) decimal 8
 - d) decimal 222
- Q.9 In binary system, decimal 1 can be written as
- a) 0001
 - b) 0010
 - c) 0100
 - d) 1000
- Q.10 After counting 1, 1, 10, 11 the next binary number is
- a) 15
 - b) 100
 - c) 110
 - d) 120
- Q.11 is not an octal number
- a) 15
 - b) 19
 - c) 77
 - d) 101
- Q.12 Which of the following binary relations is invalid?
- a) $1 + 1 = 0$
 - b) $0 \times 0 = 0$

- c) $1 \times 1 = 1$ d) $0 + 1 = 1$ c) 1010 d) 1110
- Q.13 The cumulative addition of the four binary bits (1+1+1+1) gives
- a) 100 b) 111
c) 1001 d) 1111
- Q.14 If decimal 10 in binary is 1010. Then decimal 100 in binary will be
- a) 1111111 b) 1100100
c) 1100100 d) 1000100
- Q.15 The binary equivalent of A16 is
- a) 1000 b) 1010
c) 1011 d) 1110
- Q.16 The number 1000_2 is equivalent to decimal number
- a) four b) eight
c) sixteen d) one thousand
- Q.17 Binary 111111 represents
- a) decimal 51 b) decimal 63
c) decimal 87 d) decimal 99
- Q.18 In binary system decimal 0.875 is represented by
- a) 0.001 b) 0.0101
c) 0.011 d) 0.111
- Q.19 In binary system decimal 10.75 is represented by
- a) 10.1010 b) 101.1110
c) 111.1111 d) 1010.11
- Q.20 Binary 1000 when subtracted from binary 1111, the result will be
- a) 111 b) 1000
- Q.21 The result of binary subtraction (100 – 001) is
- a) 001 b) 011
c) 111 d) -111
- Q.22 Due to which of the following main reasons the digital computers use complementally subtraction?
- a) It avoids direct subtraction
b) It is a very simple process
c) It simplifies their circuitry
d) It can handle negative numbers easily
- Q.23 BCD code is.....
- a) a binary code
b) an alphanumeric code
c) non-weighted
d) the same thing as binary numbers.
- Q.24 A logic gate is an electronic circuit which
- a) works on binary algebra
b) makes logic decisions
c) alternates between 0 and 1 values
d) allows electron flow only in one direction
- Q.25 Binary 1000 will be the result of which of the following subtraction in binary system?
- a) 11111-1110 b) 1011-1110
c) 1111-111 d) 1010-101

- Q.26 Logic state 1, in positive logic, corresponds to
- zero voltage
 - lower voltage level
 - positive voltage
 - higher voltage level
- Q.27 Logic state 1, in negative logic, corresponds to
- zero voltage
 - lower voltage level
 - negative voltage
 - more negative voltage
- Q.28 For AND gate the Boolean expression is
- $A = B$
 - $A + B = y$
 - $A - B \neq Y$
 - $A \cdot B = Y$
- Q.29 $A+B=Y$ is the Boolean expression for which of the following?
- NOR gate
 - AND gate
 - XNOR gate
 - None of the above
- Q.30 An XOR gate produces an output only when its two inputs are.....
- same
 - different
 - low
 - high
- Q.31 In Boolean algebra different variables used can have values of
- true or false
 - low or high
 - ON or OFF
 - 0 or 1
- Q.32 For getting an output from an XNOR gate, its both inputs must be.....
- at the same logic level
 - at the opposite logic level
 - high
 - low
- Q.33 Gate is formed by inversion of the output of the AND gate.
- XNOR
 - NOR
 - OR
 - NAND
- Q.34 Gate corresponds to the action of parallel switches
- NAND
 - NOR
 - OR
 - NAND
- Q.35 A NOR gate is ON only when all its inputs are
- OFF
 - ON
 - positive
 - high
- Q.36 A combination of AND function and NOT function will results in Gate
- NAND
 - AND
 - XNOR
 - NOR
- Q.37 $A = A$ is the Boolean expression for
- multiplier
 - inverter
 - adder
 - subtract or
- Q.38logic function has the output low only when both inputs are high
- NOR
 - OR
 - AND
 - NAND
- Q.39 The dual of the statement $(A + 1) = 1$ is

- a) $A + A = A$ b) $A \cdot 1 = A$
 c) $A \cdot A = 1$ d) $A \cdot 0 = 0$
- Q.40 In Boolean algebra , $1 + A + B + C$ is equal to
 a) $1 + 3A$ b) $1 + A$
 c) A d) 1
- Q.41 The radix for binary system is
 a) 10 b) 2
 c) 1 d) 0
- Q.42 In Boolean algebra, $A + A + A + \dots + A$ is the same as
 a) zero b) A
 c) nA d) A^n
- Q.43 In a certain 2- point logic gate, when $A = 0$,
 $B = 0$ and $C = 1$, it must be.....
 a) NOR gate b) XOR gate
 c) AND gate d) NAND gate
- Q.44 Integrated circuit logic gates contain the properties of
 a) diodes
 b) bipolar junction transistors
 c) resistors
 d) all of the above
- Q.45 Saturated logic circuits have inherently....
 a) higher power dissipation
 b) low switching speed
 c) short saturation delay time
 d) none of the above
- Q.46 The abbreviation TTL stands for
 a) Transistor-transistor logic
 b) Transistor-transistor logic
 c) Transistor- transistor logic
 d) Tuned transistor logic
- Q.47 IGFET stands for
 a) Insulated gate field effect transistor
 b) Integrated gain field effect transistor
 c) Infinite gain field effect transistor
 d) Imaginary grid field effect transistor
- Q.48 DTL stands for
 a) Delayed tracking logic
 b) Diode transistor logic
 c) Digital timing logic
 d) Dynamic transient logic
- Q.49 The basic DTL configuration is.... Gate.
 a) OR b) NOR
 c) NAND d) AND
- Q.50 The basic circuit configuration for TTL resembles that of a Gate.
 a) OR b) NOR
 c) AND d) NAND