

Model Question Paper-1/2 with effect from 2022-23 (CBCS Scheme)

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First/Second Semester B.E. Degree Examination Subject Title Introduction to Electronics Engineering (MCQ)

TIME: 01 Hours

Max. Marks: 50

- Note: 01.
02.
03.

Q.01	L1	Rectifier converts a)AC to DC b) DC to DC c) DC to AC d)AC to AC
2	L1	For a step down Transformer turns ratio should be a) $N_2 > N_1$ b) $N_1 < N_2$ c) $N_1 = N_2$ d) $N_1 \neq N_2$
3	L2	BJT acts as a switch in a)Cutoff and Active region b)Active and Saturation region c)Active and cutoff region d)Cutoff and Saturation region
4	L1	Component of a Smoothing Filter a) Resistor b)Capacitor C)Diode D)Transformer
5	L1	Bridge wave rectifier uses _____ number of Diodes to get Rectified output a)1 b)2 c)4 d)3
6	L2	Multi Stage Amplifier Over gain will be a) $Av_1 + Av_2 + Av_3$ b) $Av_1 * Av_2 * Av_3$ c) $Av_1 / Av_2 / Av_3$ d) $Av_1 - Av_2 - Av_3$
7	L2	A circuit that amplifies the difference between two signals is called a)Differential Amplifier b)Operational Amplifier c)Buffer d)Transistor
8	L1	Negative feedback in an Amplifier a) Reduced gain b)Reduces bandwidth c)Increase noise d)increase frequency
9	L1	Op Amp as a Voltage Follower has a Voltage Gain of a)Zero b)Unity c)Negative value d)less than unity
10	L1	Ideal Op-Amp has following characteristics a) $R_{in} = \infty, A = \infty, R_o = 0$. b) $R_{in} = 0, A = \infty, R_o = 0$. c) $R_{in} = \infty, A = \infty, R_o = \infty$ d) $R_{in} = \infty, A = \infty, R_o = \infty$.
11	L1	An oscillator produces _____ oscillations a)Damped b)UnDamped c) Modulated d)none of thee
12	L1	An oscillator employs _____ feedback a)Positive b)Negative c)both d)none
13	L1	In a Phse shift Oscillator we use _____ RC sections a)2 b)3 c)4 d)5
14	L1	The Piezeo electric effect in a crystal is _____ a)A voltage developed because of mechanical stress b)A change in resistance of temperature c) A change in frequency of temperature d)none
15	L1	If crystal frequency changes with temperature, we say that crystal has _____ temperature coefficient a)negative b)zero c)none d)Positive
16	L1	Crystal oscillator frequency is very stable due to _____ of the crystal a)Rigidity b)Vibrations c)Low Q d) High Q
17	L1	An Oscillator differs from an amplifier because it _____ a)Has more gain b) requires no input signal c)requires no DC supply d)Always has same input

18	L1	Q of a crystal is of the order of _____ a)100 b)1000 c)50 d)>10K
19	L1	Signal Generator generally used in laboratories is _____ oscillator a)Hartely b)Wein bridge c)Crystal d)Phase shift
20	L2	In boolean algebra, the OR operation is performed by which properties? a) Associative properties b) Commutative properties c) Distributive properties d) all the above
21	L1	The expression for Absorption law is given by _____ a) $A + AB = A$ b) $A + AB = B$ c) $AB + AA' = A$ d) $A + B = B + A$
22	L3	Complement of the expression $A'B + CD'$ is _____ a) $(A' + B)(C' + D)$ b) $(A + B')(C' + D)$ c) $(A' + B)(C' + D)$ d) $(A + B')(C + D')$
23	L3	Simplify $Y = AB' + (A' + B)C$. a) $AB' + C$ b) $AB + AC$ c) $A'B + AC'$ d) $AB + A$
24	L1	Canonical form is a unique way of representing _____ a) SOP b) Min term c) Boolean Expressions d) POS
25	L3	How many gates are required to implement the following Boolean function $xy + x(x+z) + y(x+z)$ a)1 b)2 c)4 d)5
26	L2	The process of reduction of circuit will _____ cost of circuit a)not change b)increase c)decrease d)none
27	L1	Boolean algebra can be used _____ a) For designing of the digital computers b) In building logic symbols c) Circuit theory d) Building algebraic functions
28	L2	$F(X,Y,Z,M) = X'Y'Z'M'$. The degree of the function is _____ a) 2 b) 5 c) 4 d) 1
29	L1	What are the canonical forms of Boolean Expressions? a) OR and XOR b) NOR and XNOR c) MAX and MIN d) SOM and POM
30	L1	The _____ of all the variables in direct or complemented form is a maxterm. a) addition b) product c) moduler d) subtraction
31	L1	Which type of memory is suitable for low volume production of embedded systems? a) Non-volatile b) RAM c) Volatile d) ROM

32	L1	How an embedded system communicate with the outside world? a) Memory b) Output c) Peripherals d) Input
33	L1	Which of the following helps in reducing the energy consumption of the embedded system? a) emulator b) debugger c) simulator d) compilers
34	L1	Which of the following is the pin efficient method of communicating between other devices? a) memory port b) peripheral port c) parallel port d) serial port
35	L1	Which of the following unit protects the memory? a) memory management unit b) peripheral unit c) execution unit d) bus interface unit
36	L1	Which of the following statements are true for von Neumann architecture? a) separate bus between the program memory and data memory b) external bus for program memory and data memory c) external bus for data memory only d) shared bus between the program memory and data memory
37	L1	Sensors are used across _____ of embedded system. a)input b)output c)Processing the data d)none
38	L1	An Embedded system is a combination of _____. a)software b)hardware c)both d)devices
39	L1	An Embedded system is classified in to how many types a)1 b)2 c)3 d)4
40	L1	USB used for _____ data a)sending b)storing c) receiving d)deleting
41	L2	In FM the _____ of the information signal modulates the frequency of carrier signal a)Amplitude b)Frequency c)phase d) all
42	L1	Modulation is of _____ types a)Analog Modulation b)Digital Modulation c)Pulse Modulation and spread spectrum modulation d)all
43	L1	Function of Modulator is _____ a)Modulates the signal b)Demodulates the signal c)maintains the signal d)none
44	L1	Which type of modulation is used for radio transmission in India? a)Amplitude modulation b)Frequency Modulation c)Phase Modulation d)none
45	L1	Bandwidth is expressed in terms of _____. a) Bits per second b) Hertz c) Centimeters d)seconds
46	L1	Modulation index gives the ratio of _____. a) Carrier voltage and voltage of Modulating signal b) the voltage of Modulating signal and the un-modulates signal voltage c) The voltage of Modulating signal and carrier voltage d) none
47	L1	Signal is represented in _____ domains. a) Time domain b) Frequency domain c) Both a and b d)none
48	L1	What are the units of modulation rate? a)Seconds b) Baud c) Meters d) Centimeters
49	L1	On which component modulation is performed? a) Transmitter and Receiver b) Signal c)Zammer d)none
50	L1	The standard form of PAM is _____ a) Pulse Amplitude Modulation b) Phase Amplitude Modulation c) Positive Amplitude Modulation d) None of the above

*Bloom's Taxonomy Level: Indicate as L1, L2, L3, L4, etc. It is also desirable to indicate the COs and POs to be attained by every bit of questions.