

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 <input checked="" type="checkbox"/> 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) $N_1 = N_2$ <input checked="" type="checkbox"/> $N_1 \neq N_2$
3	L2	BJT acts as a switch in a) Cutoff and Active region b) Active and Saturation region c) Active and cutoff region <input checked="" type="checkbox"/> Cutoff and Saturation region
4	L1	Component of a Smoothing Filter a) Resistor <input checked="" type="checkbox"/> Capacitor C) Diode D) Transformer
5	L1	Bridge wave rectifier uses _____ number of Diodes to get Rectified output a) 1 b) 2 <input checked="" type="checkbox"/> 4 d) 3
6	L2	Multi Stage Amplifier Over gain will be a) $Av_1 + Av_2 + Av_3$ <input checked="" type="checkbox"/> $Av_1 * Av_2 * Av_3$ 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 <input checked="" type="checkbox"/> Differential Amplifier b) Operational Amplifier c) Buffer d) Transistor
8	L1	Negative feedback in an Amplifier <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> Unity c) Negative value d) less than unity
10	L1	Ideal Op-Amp has following characteristics <input checked="" type="checkbox"/> $R_{in} = \infty, A = \infty, R_o = 0$. 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 <input checked="" type="checkbox"/> UnDamped c) Modulated d) none of these
12	L1	An oscillator employs _____ feedback <input checked="" type="checkbox"/> Positive b) Negative c) both d) none
13	L1	In a Phase shift Oscillator we use _____ RC sections a) 2 <input checked="" type="checkbox"/> 3 c) 4 d) 5
14	L1	The Piezo electric effect in a crystal is _____ <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> Positive
16	L1	Crystal oscillator frequency is very stable due to _____ of the crystal a) Rigidity b) Vibrations c) Low Q <input checked="" type="checkbox"/> High Q
17	L1	An Oscillator differs from an amplifier because it _____ a) Has more gain <input checked="" type="checkbox"/> requires no input signal c) requires no DC supply d) Always has same input

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18	L1	Q of a crystal is of the order of _____ a)100 b)1000 c)50 <input checked="" type="checkbox"/> >10K
19	L1	Signal Generator generally used in laboratories is _____ oscillator a)Hartely <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> all the above
21	L1	The expression for Absorption law is given by _____ <input checked="" type="checkbox"/> $A + AB = A$ b) $A + AB = B$ c) $AB + AA' = A$ d) $A + B = B + A$
22	L3	Complement of the expression $A'B + CD'$ is _____ a) $(A' + B)(C' + D)$ <input checked="" type="checkbox"/> $(A + B')(C' + D)$ c) $(A' + B)(C' + D)$ d) $(A + B')(C + D')$
23	L3	Simplify $Y = AB' + (A' + B)C$. <input checked="" type="checkbox"/> $AB' + C$ 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 <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> 5
26	L2	The process of reduction of circuit will _____ cost of circuit a)not change b)increase <input checked="" type="checkbox"/> decrease d)none
27	L1	Boolean algebra can be used _____ <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> 4 d) 1
29	L1	What are the canonical forms of Boolean Expressions? a) OR and XOR b) NOR and XNOR <input checked="" type="checkbox"/> MAX and MIN d) SOM and POM
30	L1	The _____ of all the variables in direct or complemented form is a maxterm. <input checked="" type="checkbox"/> addition b) product c) moduler d) subtraction
31	L1	Which type of memory is suitable for low volume production of embedded systems? <input checked="" type="checkbox"/> Non-volatile b) RAM c) Volatile d) ROM

32	L1	How an embedded system communicate with the outside world? a) Memory b) Output <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> serial port
35	L1	Which of the following unit protects the memory? <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> shared bus between the program memory and data memory
37	L1	Sensors are used across _____ of embedded system. <input checked="" type="checkbox"/> input b) output c) Processing the data d) none
38	L1	An Embedded system is a combination of _____. a) software b) hardware <input checked="" type="checkbox"/> both d) devices
39	L1	An Embedded system is classified in to how many types a) 1 b) 2 c) 3 <input checked="" type="checkbox"/> 4
40	L1	USB used for _____ data a) sending <input checked="" type="checkbox"/> storing c) receiving d) deleting
41	L2	In FM the _____ of the information signal modulates the frequency of carrier signal a) Amplitude <input checked="" type="checkbox"/> Frequency c) phase d) all
42	L1	Modulation is of _____ types a) Analog Modulation b) Digital Modulation c) Pulse Modulation and spread spectrum modulation <input checked="" type="checkbox"/> all
43	L1	Function of Modulator is _____ <input checked="" type="checkbox"/> 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? <input checked="" type="checkbox"/> Amplitude modulation b) Frequency Modulation c) Phase Modulation d) none
45	L1	Bandwidth is expressed in terms of _____. a) Bits per second <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> The voltage of Modulating signal and carrier voltage d) none
47	L1	Signal is represented in _____ domains. a) Time domain b) Frequency domain <input checked="" type="checkbox"/> Both a and b d) none
48	L1	What are the units of modulation rate? a) Seconds <input checked="" type="checkbox"/> Baud c) Meters d) Centimeters
49	L1	On which component modulation is performed? a) Transmitter and Receiver <input checked="" type="checkbox"/> Signal c) Zammer d) none
50	L1	The standard form of PAM is _____. <input checked="" type="checkbox"/> Pulse Amplitude Modulation b) Phase Amplitude Modulation c) Positive Amplitude Modulation d) None of the above