

<b>Id</b>	<b>1</b>
Question	Upon n-type doping. Fermi level of intrinsic semiconductor-----
A	Shift towards valance band
B	Locate at centre of band gap
C	Shift towards conduction band
D	Locate at centre of conduction band
Answer	C

<b>Id</b>	<b>2</b>
Question	In nMOS transistor, if the gate is connected to the drain,then it behaves as a -----
A	diode
B	capacitor
C	Transistor
D	passive resistor
Answer	A

<b>Id</b>	<b>3</b>
Question	In case of nMOS transistor, the drain current increases with increase in the drain voltage.This is due to -----
A	biasing potential of substrate
B	doping concentration of n+ drain
C	channel width modulation
D	gate potential
Answer	C

<b>Id</b>	<b>4</b>
Question	In semiconductor, the current flows due to -----
A	hopping of holes
B	hopping of electrons through holes
C	electron flow
D	photons
Answer	B

<b>Id</b>	<b>5</b>
Question	The process of selectively removing certain protective regions from the surface of a substrate is known as -----
A	Epitaxy
B	Lithography
C	Metalization
D	Bonding
Answer	B

<b>Id</b>	<b>6</b>
Question	The poles of the transfer function $TF = \frac{1}{(s-4)(s+9)}$ are
A	s=2, s=3
B	s=4, s=9
C	s=-4 s=-9
D	s=4 s=-9
Answer	D

<b>Id</b>	<b>7</b>
Question	According to Thevenin's Theorem, the -----
A	Thevenin's resistance should in series with the Thevenins voltage source.
B	Thevenin's resistance should in parallel with the Thevenins voltage source
C	Thevenin's resistance should in series with the Thevenins current source
D	Thevenin's resistance should in parallel with the Thevenins current source
Answer	A

<b>Id</b>	<b>8</b>
Question	Bode plots are graphs of-----
A	log of magnitude and phase angle against frequency.
B	log of magnitude against log of frequency
C	log of magnitude and phase angle against log of frequency.
D	Log of phase angle against log of frequency.
Answer	C

<b>Id</b>	<b>9</b>
Question	Which of following control system is absolute stable in given time domain?
A	$TF = \frac{1}{(S-4)}$
B	$TF = \frac{1}{(S+4)}$
C	$TF = \frac{1}{(S-3)(S+3)}$
D	$TF = \frac{1}{(S-3)(S-3)}$
Answer	B

<b>Id</b>	<b>10</b>
Question	The trigonometric Fourier series of a periodic time function can have-----
A	consine terms
B	sine terms
C	DC and cosine terms
D	cosine and sine terms
Answer	D

<b>Id</b>	<b>11</b>
Question	Which of the following stage is essential for operational amplifier design?
A	Current Sink
B	Current Source
C	Current Mirror
D	Miller compensator
Answer	A

<b>Id</b>	<b>12</b>
Question	Which of the following is used to obtain square wave from any kind of input wave?
A	Differentiator
B	Schmitt Trigger circuit
C	Integrator
D	Log amplifier
Answer	B

<b>Id</b>	<b>13</b>
Question	In case of operational amplifier 741 based inverting amplifier, the terminal 2 is called virtual ground. This is because-----
A	Low current gain
B	High voltage gain
C	High input impedance
D	Low output impedance
Answer	C

<b>Id</b>	<b>14</b>
Question	Monostable multivibrator is excited with the frequency of 2KHz. The period of output pulse is ----- .The timing resistor and capacitor are 680 Ohm and $0.1 \mu F$ respectively.
A	46.92 mS
B	$46.92 \mu S$
C	$68 \mu S$
D	$176 \mu S$
Answer	B

<b>Id</b>	<b>15</b>
Question	The output of a rectifier circuit without filter is -----
A	50 Hz AC
B	Smooth DC
C	Pulsating DC
D	25 Hz DC
Answer	C

<b>Id</b>	<b>16</b>
Question	In n flip flops are cascaded in series then, resulting ripple counter is -----
A	modulo – n counter
B	modulo – n+1 counter
C	modulo – n-1 counter
D	modulo – 2n counter
Answer	A

<b>Id</b>	<b>17</b>
Question	Which of the following IC is used to design decade counter?
A	7495
B	7400
C	7410
D	7490
Answer	D

<b>Id</b>	<b>18</b>
Question	Give name of the gate showing following timing diagram.
A	EXOR Gate
B	NAND Gate
C	NOR Gate
D	AND Gate
Answer	A

<b>Id</b>	<b>19</b>
Question	A full scale input is applied to the R-2R ladder network digital to analog converter with 10V as a reference voltage source. The resulting analog output is -----Volt
A	10V
B	0.9375V
C	9.375V
D	5V
Answer	C

<b>Id</b>	<b>20</b>
Question	Commutative law for addition and multiplication holds good for-----
A	OR gate only
B	AND gate only
C	NOT gate only
D	Both OR and AND gate
Answer	D

<b>Id</b>	<b>21</b>
Question	Which of the following cycle is followed in microprocessor 8085 for execution of an instruction?
A	Decode, fetch, execute
B	Fetch, decode, execute
C	Execute, fetch, decode
D	Fetch, execute, decode
Answer	B

<b>Id</b>	<b>22</b>
Question	The timer of microcontroller 8051 in Model 1 acts as ----- time
A	16 bit
B	8bit
C	13 bit
D	32 bit
Answer	A

<b>Id</b>	<b>23</b>
Question	IO/M signal is generally used for distinguishing between:
A	Data entry from keyboard and memory device
B	Memory mapped IOs and IO mapped IOs
C	Serial and parallel communication.
D	Synchronous and asynchronous data transfers
Answer	B

<b>Id</b>	<b>24</b>
Question	In 8086 micro controller the address of the code segment should be loaded into -----
A	ES register
B	DS register
C	SS register
D	CS register
Answer	D

<b>Id</b>	<b>25</b>
Question	The width of the instruction queue/pipeline in 8086 microprocessor is :
A	4-bytes
B	6-bytes
C	8-bytes
D	2-bytes
Answer	B

<b>Id</b>	<b>26</b>
Question	Which of the following is used for dynamic allocation of memory block?
A	malloc
B	struct
C	free
D	stack
Answer	A

<b>Id</b>	<b>27</b>
Question	In C, which of the following statement is used for runtime assignment?
A	printf
B	puts()
C	scanf()
D	putch()
Answer	C

<b>Id</b>	<b>28</b>
Question	Pointer in C is nothing but-----
A	address of the variable
B	Value of the variable
C	both address and value of the variables
D	one of the data type
Answer	A

<b>Id</b>	<b>29</b>
Question	The first index number in an array starts with .....and the index number of an array of size n will be :
A	1, n
B	1, n-1
C	0, n
D	0, n – 1
Answer	D

<b>Id</b>	<b>30</b>
Question	Which of the following has highest priority?
A	addition
B	parenthesis
C	multiplication
D	division
Answer	B

<b>Id</b>	<b>31</b>
Question	Gunn diode is used to generate-----
A	LASER
B	Milimeter waves
C	Microwaves
D	Light
Answer	C



<b>Id</b>	<b>32</b>
Question	Which of the following is used to detect microwaves-----
A	PIN Diode
B	Gunn Diode
C	Klystron Tube
D	Magnetron
Answer	A

<b>Id</b>	<b>33</b>
Question	The magic tee is a -----.
A	microwave device for 9 dB attenuation
B	tee of H plane only
C	tee of E only
D	combination of E and H plane trees
Answer	D

<b>Id</b>	<b>34</b>
Question	According to superheterodyne principle, intermediate frequency (IF) for AM radio receiver is -----
A	550KHz
B	455KHz
C	1600KHz
D	800KHz
Answer	B

<b>Id</b>	<b>35</b>
Question	According to Nyquist theorem-----
A	Sampling frequency =Signal frequency
B	Sampling frequency =Signal frequency /2
C	Sampling frequency=2x Signal frequency
D	Sampling frequency=10 x Signal frequency
Answer	C

<b>Id</b>	<b>36</b>
Question	In Amplitude modulation, maximum power is available in ----- component of modulated wave.
A	Carrier
B	Upper sideband
C	Lower sideband
D	Either upper or lower sideband
Answer	A

<b>Id</b>	<b>37</b>
Question	The Zigbee devices is operating at -----band of microwave frequency.
A	980 MHz
B	2.4 GHz
C	1600 MHz
D	5 GHz
Answer	B
Unit	Pet_Electronics_22

<b>Id</b>	<b>38</b>
Question	The standard baud rate for computer communication is -----
A	12400 bps
B	2400 bps
C	4800 bps
D	9600 bps
Answer	D

<b>Id</b>	<b>39</b>
Question	In PSK modulation_____ detection method is used.
A	Coherent
B	Synchronous
C	Asynchronous
D	Ratio
Answer	A

<b>Id</b>	<b>40</b>
Question	Granular noise present in _____ modulation
A	Adaptive delta
B	Delta
C	ASK
D	FSK
Answer	B

<b>Id</b>	<b>41</b>
Question	TRIAC is a bidirectional power electronic device which contains-----
A	Two BJTs connected in parallel
B	Two pn junction diodes connected in series
C	Two SCRs connected in reverse parallel
D	Two SCRs connected in series
Answer	C

<b>Id</b>	<b>42</b>
Question	The Snubber circuit is used in thyristor circuits for
A	Triggering
B	dv/dt protection
C	di/dt protection
D	phase shift
Answer	B

<b>Id</b>	<b>43</b>
Question	Colour of light emitted by LED depends on:
A	Reflector used in construction
B	Magnitude of forward bias
C	Energy band gap
D	Forward current
Answer	C

<b>Id</b>	<b>44</b>
Question	Which is the major cause of dispersion in multimode step index optical fiber?
A	Intermodal
B	Material
C	Wave guide
D	Chromatic
Answer	A

<b>Id</b>	<b>45</b>
Question	In optical fibre light propagation takes place with the principle of -----
A	Total Internal Absorption
B	Total internal reflection
C	Total internal Scattering
D	Total internal diffraction
Answer	B

<b>Id</b>	<b>46</b>
Question	Strain gauge is a/ an-----displacement into a change of electrical resistance.
A	Active device and converts mechanical
B	Passive device and converts electrical
C	Passive device and converts mechanical
D	Active device and converts electrical
Answer	C

<b>Id</b>	<b>47</b>
Question	Standard pH electrode at normal conditions, generates emf----- per pH
A	420 mV
B	840 mV
C	120 mV
D	60 mV
Answer	D

<b>Id</b>	<b>48</b>
Question	Which of following is monolithic temperature sensor?
A	PT100
B	AD590
C	J-K type thermocouple
D	Thermistor
Answer	B

<b>Id</b>	<b>49</b>
Question	Which of following statement is correct?
A	A control system is said to absolute stable, if poles of the transfer function are positive and real.
B	A control system is said to absolute stable, if poles of the transfer function are positive and imaginary.
C	A control system is said to absolute stable, if poles of the transfer function are negative and real.
D	A control system is said to absolute stable, if poles of the transfer function are negative and imaginary.
Answer	C

<b>Id</b>	<b>50</b>
Question	A PI controller increases:
A	Type and order of system increases by 1
B	Steady State error remains unchanged
C	Type and order of system decreases by 1
D	Type of system remains unchanged
Answer	A