

eExam Question Bank

Coursecode:

Choose Coursecode

Show entriesSearch:

<input type="checkbox"/>	Question Type ↓	Question ↑	A ↑	B ↑	C ↑	D ↑	Answer ↑	Remark ↑
<input type="checkbox"/>	FBQ	Heat transfer from components is <input type="text"/> _to surface area	Directly proportional					<input type="button" value="eExam"/>
<input type="checkbox"/>	FBQ	A logic gate is an electronic <input type="text"/> which makes the logical decisions	Device					<input type="button" value="eExam"/>
<input type="checkbox"/>	FBQ	Two of the most important theorems of Boolean algebra were contributed by a great mathematician named <input type="text"/>	DEMORGAN					<input type="button" value="eExam"/>
<input type="checkbox"/>	FBQ	To construct an accurate digital clock, a very highly controlled basic <input type="text"/> is required	Clock frequency					<input type="button" value="eExam"/>
<input type="checkbox"/>	FBQ	A CLEAR input can also be called <input type="text"/>	Reset input					<input type="button" value="eExam"/>
<input type="checkbox"/>	FBQ	To convert a <input type="text"/> to octal, we simply group the bits into groups of threes starting from the right	Binary number					<input type="button" value="eExam"/>
<input type="checkbox"/>	FBQ	Sequential circuits are circuits whose outputs are <input type="text"/> on not only the current inputs, but also on all of the past inputs	Dependent					<input type="button" value="eExam"/>
<input type="checkbox"/>	FBQ	The SR latch is <input type="text"/> to its inputs all the time	Sensitive					<input type="button" value="eExam"/>

<input type="checkbox"/>									
<input type="checkbox"/>	FBQ	The digital system consists of two types of circuits, namely; Combinational circuits and <input type="text"/>	Sequential circuits						eExam
<input type="checkbox"/>	FBQ	The transformer is responsible for <input type="text"/> the voltage level of incoming ac mains supply	stepping down						eExam
<input type="checkbox"/>	FBQ	The <input type="text"/> is the ratio between the output voltage and the input voltage	voltage gain						eExam
<input type="checkbox"/>	FBQ	Three Terminal Adjustable Regulators rely on <input type="text"/> to set the output voltage	eternal resistors						eExam
<input type="checkbox"/>	FBQ	<input type="text"/> is implemented by sensing the elements junction temperature and reducing the powerdissipation until the temperature drops to a tolerable level	Thermal Shut down						eExam
<input type="checkbox"/>	FBQ	The minimum current as set by the overload protection is <input type="text"/>	320mA						eExam
<input type="checkbox"/>	FBQ	The purpose of the <input type="text"/> is to prevent the current through the series pass transistor from eceeding a predetermined value.	Overload protection						eExam
<input type="checkbox"/>	FBQ	<input type="text"/> is to boost the output current capabilities of the error amplifier.	The Series Pass element						eExam

<input type="checkbox"/>									
<input type="checkbox"/>	FBQ	The aim of the error amplifier is to drive the pass transistor in such way that if the V_o is increasing, the transistor will reduce its amplification and if V_o is decreasing, the transistor will increase its amplification such that V_o is kept <input type="text"/>	constant						eExam
<input type="checkbox"/>	FBQ	<input type="text"/> takes a scaled version of the output and compares it with the reference voltage and adjusts V_o via the series pass transistor.	The Error amplifier						eExam
<input type="checkbox"/>	FBQ	<input type="text"/> provides a scaled version of the input which is stabilized by the Zener diode	The Voltage reference						eExam
<input type="checkbox"/>	FBQ	<input type="text"/> control or maintain a constant dc voltage output by continuously adjusting the voltage drop across a power transistor connected in series between the unregulated input and the load	Series regulators						eExam
<input type="checkbox"/>	FBQ	<input type="text"/> is defined as the rate of change of output voltage with output current	Output resistance						eExam
<input type="checkbox"/>	FBQ	The full wave (centre tapped and bridge circuits) have a higher output voltage with <input type="text"/>	reduced ripple						eExam
<input type="checkbox"/>	FBQ	The <input type="text"/> the ripple factor the better the filter	Lower						eExam
<input type="checkbox"/>	FBQ	<input type="text"/> is an indication of effectiveness of the filter and it is defined as rms ripple voltage	Ripple factor						eExam

<input type="checkbox"/>									
<input type="checkbox"/>	FBQ	The easiest way to smooth a circuit is by adding a <input type="text"/> in parallel to the resistive load	capacitor						eExam
<input type="checkbox"/>	FBQ	<input type="text"/> is the most frequently used rectifier circuit for electronic DC power supplies	Full Wave Bridge Rectifier						eExam
<input type="checkbox"/>	FBQ	The <input type="text"/> on the other hand reads the effective or rms value of the current passing through it.	AC meter						eExam
<input type="checkbox"/>	FBQ	The <input type="text"/> converts the sinusoidal wave form with an average value of zero to a unidirectional wave form with a non zero average waveform.	half wave rectifier						eExam
<input type="checkbox"/>	FBQ	<input type="text"/> steps up the voltage from the ac mains. Its output voltage is higher than the input voltage level.	step-up transformer						eExam
<input type="checkbox"/>	FBQ	<input type="text"/> DC power supply has a terminal voltage which remains constant regardless of the amount of current drawn from it.	Regulated power supply						eExam
<input type="checkbox"/>	FBQ	The DC power supply is a circuit design of provide DC power supply mostly for the powering of <input type="text"/>	portable devices						eExam
<input type="checkbox"/>	FBQ	The integrator is a <input type="text"/> filter and produces more output for low frequency signals	low pass						eExam
<input type="checkbox"/>	FBQ	The Op amp integrator produces an output that is <input type="text"/> to the area under the curve of the input voltage	proportional						eExam

<input type="checkbox"/>									
<input type="checkbox"/>	FBQ	The _____ of the operational amplifier provides an output voltage proportional to the algebraic sum of the inputs, each multiplied by a constant gain factor	adder circuit						eExam
<input type="checkbox"/>	FBQ	The _____ is a direct coupled amplifier capable of amplifying signals from DC up to a few MHz	operational amplifier						eExam
<input type="checkbox"/>	FBQ	There are basically _____ of feedback amplifier circuit topologies depending on how the signals are added at the input.	4 types						eExam
<input type="checkbox"/>	FBQ	In the _____ arrangement, the feedback voltage is in the same phase as the input voltage and it increases the input voltage amplitude.	positive feedback						eExam
<input type="checkbox"/>	FBQ	The _____ is the ratio between the output voltage and the input voltage	voltage gain						eExam
<input type="checkbox"/>	FBQ	The total _____ of the circuit is the parallel combination of R1, R2 and Rin(base).	input impedance						eExam
<input type="checkbox"/>	FBQ	Electronic amplifying devices such as BJT and FET have three terminals E, B, _____ and S, G, D	C						eExam
<input type="checkbox"/>	FBQ	The collector current and the base currents flow through the _____	collector resistor						eExam

<input type="checkbox"/>									
<input type="checkbox"/>	FBQ	The determination of the q point is through the process of <input type="text"/>	biasing						eExam
<input type="checkbox"/>	FBQ	Biasing can be defined as the setting up of the DC voltages and current in an <input type="text"/>	electronic circuit						eExam
<input type="checkbox"/>	FBQ	The loadlines enables the <input type="text"/> of the transistor characteristics	visualization						eExam
<input type="checkbox"/>	FBQ	In the <input type="text"/> configuration the input terminal is the base while the output terminal is the emitter and the collector is common to both the input and the output	common collector						eExam
<input type="checkbox"/>	FBQ	In the <input type="text"/> Configuration the input terminal is the base while the output terminal is the collector and the emitter is common to both the input and the output	common emitter						eExam
<input type="checkbox"/>	FBQ	A <input type="text"/> is formed by joining three sections of semiconductor material, each with a different doping concentration	BJT						eExam
<input type="checkbox"/>	FBQ	A transistor is a three-terminal <input type="text"/> device that can be used for amplification and switching	semiconductor						eExam
<input type="checkbox"/>	FBQ	Karnaugh maps are a graphical way of simplifying a <input type="text"/> and thus simplifying the resulting	Boolean expression						eExam

<input type="checkbox"/>									
<input type="checkbox"/>	FBQ	The NOR gate is also referred to as a <input type="text"/> because it can be used to simulate OR, AND and NOT gate functions	universal gate						eExam
<input type="checkbox"/>	FBQ	The <input type="text"/> gate is a combination of the NOT and the OR gate	NOR						eExam
<input type="checkbox"/>	FBQ	The <input type="text"/> gate is a logic gate which will give a high output if and only if all its inputs are high. It symbolizes logical multiplication	AND						eExam
<input type="checkbox"/>	FBQ	The <input type="text"/> gate is a gate which produces a high output of any or both (all) if its inputs are high	OR						eExam
<input type="checkbox"/>	FBQ	A <input type="text"/> is an electronic circuit which makes logic decisions	logic gate						eExam
<input type="checkbox"/>	FBQ	<input type="text"/> allows gates to be converted to others by simply inverting the inputs of the selected gate	DeMorgan's Theorem						eExam
<input type="checkbox"/>	FBQ	<input type="text"/> is the basic mathematics for the study of logic design	Boolean algebra						eExam
<input type="checkbox"/>	FBQ	Cooling fans are also used if the heat sink gets too hot, this is called <input type="text"/>	forced convection						eExam
<input type="checkbox"/>	FBQ	Heat sinks are made in many <input type="text"/> and sizes	Shapes						eExam

<input type="checkbox"/>									
<input type="checkbox"/>	FBQ	A <input type="text"/> is a metal structure usually with fins that is bonded, clipped or clamped to the device package to facilitate heat flow from case to ambient	heat sink						eExam
<input type="checkbox"/>	FBQ	the aim of the heat sink is to increase the <input type="text"/> area of the component thereby increasing the rate of heat dissipation of the component	total surface						eExam
<input type="checkbox"/>	FBQ	A <input type="text"/> is a metallic material attached to an integrated circuit chip or a high power dissipating transistor	heat sink						eExam
<input type="checkbox"/>	FBQ	<input type="text"/> types of regulators rely on external resistors to set the output voltage	Three Terminal Adjustable Regulators						eExam
<input type="checkbox"/>	FBQ	The SOA is defined as the area on the V and I curve within which the device can be operated without the risk of <input type="text"/>	failure or degradation.						eExam
<input type="checkbox"/>	FBQ	SOA stands for <input type="text"/>	Safe Operating Area						eExam
<input type="checkbox"/>	MCQ	Which of the following is not a Boolean identity	$A + 0 = 0$	$A \times A = A$	$A + A = A$	$A + 1 = 1$	B		eExam
<input type="checkbox"/>	MCQ	The main advantage of CMOS digital ICs over TTL is found in their _____	Low power consumption	Cheaper price rate	Availability in the market	Compatibility with several boards	A		eExam
<input type="checkbox"/>	MCQ	Application of op amps include all the following except _____	Addition	Conversion	Subtraction	Integration	B		eExam
<input type="checkbox"/>	MCQ	Circuit protection schemes include the following except _____	Thermal shutdown	Safe area of operation	Overload protection	Underload protection	D		eExam
<input type="checkbox"/>	MCQ	Which of the following is not a valid parameter value of the ideal Op Amp?	Input impedance = infinity	Output impedance = Zero	Gain = 200000	Bandwidth = infinity	C		eExam

<input type="checkbox"/>									
<input type="checkbox"/>	MCQ	Which of these configurations is not a FET configuration?	common source	common drain	common gate	common base	D		eExam
<input type="checkbox"/>	MCQ	Which logic gate might be called "all or nothing gate"?.	OR	AND	NOR	NAND	B		eExam
<input type="checkbox"/>	MCQ	The maximum possible efficiency of the halfwave rectifier is _____	0.406	0.506	0.7	0.3	A		eExam
<input type="checkbox"/>	MCQ	The following are the various advantages of the Negative feedback except	Higher Fidelity	Reduced Noise	High stabilized Gain	Reduced Gain	D		eExam
<input type="checkbox"/>	MCQ	All of these stages are involved in the conversion of AC to a DC power supply except _____	Transformer	Rectifier	Filter	Thyristor	D		eExam
<input type="checkbox"/>	MCQ	The maximum allowable chip temperature is known as the _____ temperature.	maximum chip	integrated circuit	maximum junction	circuit	C		eExam
<input type="checkbox"/>	MCQ	The logic gate which will give a high output if and only if all its inputs are low is _____ gate.	AND	NOT	NOR	NAND	D		eExam
<input type="checkbox"/>	MCQ	In The three configurations of the bipolar junction transistor, the configuration with the lowest gain is common _____.	Base	Emitter	Drain	None of the above	A		eExam
<input type="checkbox"/>	MCQ	In the common emitter configuration the output is gotten from the _____	Base	Emitter	Collector	supply	C		eExam
<input type="checkbox"/>	MCQ	Which of the following is true about BJT transistors?	BJTs are current controlled devices	BJTs are frequency controlled devices	BJTs are power controlled devices	BJTs are voltage controlled devices	A		eExam
<input type="checkbox"/>	MCQ	In the half wave rectifier, the output ripple frequency is _____	Equal to the input frequency	Zero	Twice the input frequency	Half the input frequency	C		eExam
<input type="checkbox"/>	MCQ	Which logic gate will produce an output of 1 whenever the inputs are different and/or zero?	NOR	Exclusive-OR	OR	Exclusive-NOR	B		eExam
<input type="checkbox"/>	MCQ	_____ can be described as the change in voltage from No-load to full-load condition	Transformer	Rectifier	Voltage Divider	Voltage Regulation	D		eExam

<input type="checkbox"/>									
<input type="checkbox"/>	MCQ	Heat transfer from components is _____ to surface area	Directly proportional	Inversely proportional	Equal	Not related	A		eExam
<input type="checkbox"/>	MCQ	Application of op amps include all of the following except _____.	Adder	Subtractor	Integration	Lighting	D		eExam
<input type="checkbox"/>	MCQ	Circuit protection schemes include the following except _____.	Underload protection	Overload protection	Thermal shutdown	Safe area of operation	A		eExam
<input type="checkbox"/>	MCQ	Which of the following is not a valid parameter value of the ideal Op Amp?	Input impedance = infinity	Gain = 200000	Output impedance = Zero	Bandwidth = infinity	B		eExam
<input type="checkbox"/>	MCQ	The maximum allowable chip temperature is known as the _____ temperature.	maximum chip	integrated circuit	maximum junction	circuit	C		eExam
<input type="checkbox"/>	MCQ	The following are types of laws of Boolean except _____	Commutative	Associative	Distributive	None of the above	D		eExam
<input type="checkbox"/>	MCQ	The logic gate which will give a high output if and only if all its inputs are low is _____ gate.	AND	NOT	NOR	NAND	D		eExam
<input type="checkbox"/>	MCQ	In The three configurations of the bipolar junction transistor, the configuration with the lowest gain is common _____.	Emitter	Drain	Base	None of the above	C		eExam
<input type="checkbox"/>	MCQ	In the common emitter configuration the output is gotten from the _____	base	emitter	supply	collector	D		eExam
<input type="checkbox"/>	MCQ	Which of the following is true about BJT transistors?	BJTs are current controlled devices	BJTs are voltage controlled devices	BJTs are power controlled devices	BJTs are frequency controlled devices	A		eExam
<input type="checkbox"/>	MCQ	In the half wave rectifier, the output ripple frequency is _____	Equal to the input frequency	Zero	Twice the input frequency	Half the input frequency	C		eExam
<input type="checkbox"/>	MCQ	In the voltage divider bias, the DC bias Voltage and Current are _____	Dependent on temperature	Independent on temperature	Constant	Negligible	A		eExam
<input type="checkbox"/>	MCQ	Using a truth table, the expression $A + A'B$ can be shown to be _____	$A + B$	$A \times B$	$A + A$	$A' + B$	A		eExam
<input type="checkbox"/>	MCQ	The positive feedback current is used mainly in _____	capacitors	oscillators	oscilloscopes	transformers	B		eExam

<input type="checkbox"/>									
<input type="checkbox"/>	MCQ	The OP AMP differentiator is basically a _____ pass filter	low	medium	high	one	C		eExam
<input type="checkbox"/>	MCQ	A major disadvantage of the _____ pass transistor regulator is that they are inefficient	parallel	linear	series,	one	C		eExam
<input type="checkbox"/>	MCQ	The OR gate have a Boolean mathematical equivalence of _____	Multiplication	Inversion	Negation	Addition	D		eExam
<input type="checkbox"/>	MCQ	An _____ amplifier can perform operations, such as addition, subtraction, differentiation or integration	efficient	operational	optimizing	consistent	B		eExam
<input type="checkbox"/>	MCQ	In _____, the transistor operates somewhere between saturation and cut-off state.	Step-down Regulator	Step-up Regulator	Linear Regulator	Inverting Regulator	C		eExam
<input type="checkbox"/>	MCQ	LM317 is an example of a _____ terminal adjustable regulator	two	three	four	six	B		eExam
<input type="checkbox"/>	MCQ	The following are major applications of Zener diode except	Voltage Regulation	Voltage Limiter	Meter Protection	Voltage Converter	D		eExam
<input type="checkbox"/>	MCQ	In the Series Derived Shunt-Fed Feedback Topology the input is connected in _____	series	parallel	serial	linear	B		eExam
<input type="checkbox"/>	MCQ	The ratio of the rms value of AC components to the DC value of load voltage is referred to as the _____	Voltage Regulation	Form Factor	Ripple Factor	Rectification Factor	D		eExam
<input type="checkbox"/>	MCQ	The transistor will operate as a switch when it is biased in the	Saturation Region	Cut-off region	Forward Region	Reverse Region	A		eExam
<input type="checkbox"/>	MCQ	In negative feedback, the feedback voltage is _____ degrees out of phase with the input voltage	270	180	45	90	B		eExam
<input type="checkbox"/>	MCQ	The conversion _____ of rectification is given by the ratio of the output DC power to the total amount of input power supplied to the circuit	Output	Reliability	Efficiency	Capacity	C		eExam

<input type="checkbox"/>	MCQ	The first stage involved in the process of rectification is the _____	Transformer stage	Rectifying stage	Filtering Stage	Voltage Dividing Stage	A	eExam
<input type="checkbox"/>	MCQ	The major difference between the bridge rectifier and centre tap rectifier is that the bridge requires 4 diodes while the full wave centre tapped rectifier requires a centre tapped _____	Repeater	Transistor	Transformer	Amplifier	C	eExam
<input type="checkbox"/>	MCQ	Before the DC analysis is performed, all..... capacitors are regarded as open circuit	given	perform	order	coupling	D	eExam
<input type="checkbox"/>	MCQ	We first write the collector circuit equation by applying.....	VCC	RCIC	REIE	KVL	D	eExam
<input type="checkbox"/>	MCQ	The purpose of analysis is to determine the..... specifications of the circuit	ground	different	gain	source	B	eExam
<input type="checkbox"/>	MCQ	Biasing can be defined as the setting up of the DC voltages and..... in an electronic circuit	current	switch	amplifier	operation	A	eExam
<input type="checkbox"/>	MCQ	The curves are..... at different base currents.	operating	load	generated	point	C	eExam
<input type="checkbox"/>	MCQ	The load line is determined by identifying the..... endpoints of the line	Two	Four	Three	Six	A	eExam
<input type="checkbox"/>	MCQ	The gain for the CB configuration is always less than....., so the CB configuration is not used for current amplification	4	5	2	1	D	eExam
<input type="checkbox"/>	MCQ	It is also important to observe that the base is much.....than the emitter section of the transistor	wider	narrower	biger	smaller	B	eExam
<input type="checkbox"/>	MCQ	Typical values of β range from.....	20 to 200	25 to 200	30 to 300	20 to 300	A	eExam
<input type="checkbox"/>	MCQ	A transistor is a three-terminal semiconductor device that can be used for amplification and	magnifying	transferring	switching	controlling	C	eExam

Showing 1 to 120 of 120 entries