Name	Tags	Question Description
19BT20241	Easy	The algebraic sum of the powers in a circuit is equal to zero ***Ans:Kirchoff's Voltage Law and Conservation Of Energy***
19BT20241	Easy	Identify which of the following element is a non-linear device
19BT20241	Easy	If the capacitances 20F, 20F are in series, find the equivalent capacitance_____ ***Ans: 10F***
19BT20241	Easy	In a linear network consisting of resistors and ideal voltage source, if the value of resistors are doubled, then voltage across each resistor ***Ans:No Change***
19BT20241	Easy	Which of the following is true about an ideal Current source?
19BT20241	Easy	A voltage source having a voltage of 100 V and internal resistance of 10Ω is equivalent to a current source of
19BT20241	Easy	Constant current source is a_____ ***Ans: A constant current source is a power source which provides a constant current to a load, even despite changes and variance in load resistance. In other words, the current which a constant current source provides is steady, even if the resistance of the load varies.***
19BT20241	Easy	If a resistor R_x is connected between nodes X and Y, R_y between X and Z, R_z between Y and Z to form a delta connection, then after transformation to star, the resistor at node Y is?
19BT20241	Easy	Identify the law which is going to place a vital role in loop analysis
19BT20241	Easy	Identify the units for conductance ***Ans: Seimens,mho,ohm^{-1}***
19BT20241	Easy	What is the phase angle between the voltage and current in case of capacitor and mention which one is lagging
19BT20241	Easy	What is the value of (4+3i)-(2+2i) ***Ans: 2+i***
19BT20241	Easy	Kirchhoff's law is not applicable to circuits with____ ***Ans: Distributed parameters***
19BT20241	Easy	An electric heater draws 10 A from a 120-V line. The resistance of the heater is:
19BT20241	Easy	The number of branches b, number of nodes n, and the number of independent loops l in a network are related as:
19BT20241	Easy	A series RLC circuit has R=30Ω, X_C=50Ω, and X_L=90Ω. The impedance of the circuit is:
19BT20241	Easy	The Voltage across a capacitor leads the current through it by 90^0.
19BT20241	Easy	The imaginary part of impedance is called: ***Ans: Reactance***
19BT20241	Easy	A function that repeats itself after fixed intervals is said to be: ***Ans: Periodic Function***
19BT20241	Easy	The impedance of a capacitor increases with increase in frequency. ***Ans:False***

19BT20241	Moderate	If v_1=30 sin ($\omega t+10^0$) and v_2=20 sin ($\omega t+50^0$). Which of the following statement is true?
19BT20241	Easy	Indicate the units for reactive power ***Ans: Volt Amphere Reactive***
19BT20241	Easy	The product of rms values of current and voltage is called as ***Ans: Apparent Power***
19BT20241	Easy	The root mean square value of the voltage is
19BT20241	Easy	The ratio of peak value to the rms value is called as
19BT20241	Easy	What is the phase angle between voltage and current in case of resistor ***Ans: 0 degrees***
19BT20241	Easy	The power factor lies in between ***Ans: 0 to 1.0***
19BT20241	Easy	The power factor of capacitor is
19BT20241	Easy	The power factor is the ratio of _____ power to the _____ power. ***Ans: Real Power and Apparent Power***
19BT20241	Easy	If there are 8 nodes in network, we can get ____ number of equations in the nodal analysis.
19BT20241	Easy	The energy stored in the inductor is? ***Ans: Stored in Magnetic feild***
19BT20241	Easy	Impedance is a complex quantity having the real part as _____ and the imaginary part as _____
19BT20241	Moderate	A 25 Ω resistor has a voltage of 150 sin377 t. Find the corresponding power.
19BT20241	Easy	A practical current source can also be represented as ***Ans:A practical current source could be represented with a resistor in parallel with an ideal current source.***
19BT20241	Easy	Which of the following is true about an ideal voltage source?
19BT20241	Easy	In case of purely capacitive circuit, average power = ____ and θ=___ ***Ans: average power = 0 and ϑ=90***
19BT20241	Moderate	A voltage v (t) = 100sinωt is applied to a circuit. The current flowing through the circuit is i(t) = 15sin(ωt-30^o). Find the effective value of voltage.
19BT20241	Difficult	Determine the average power delivered to the circuit consisting of an impedance Z = 5+j8 when the current flowing through the circuit is I = 5∠30^o.
19BT20241	Easy	Two ideal voltage sources of unequal output voltages cannot be placed in.....
19BT20241	Easy	Time constant of an inductive circuit ***Ans:Increses with increase of inductance and decrease of resistance***
19BT20241	Moderate	In a purely inductive circuit if the supply frequency is reduced to 1/2, the current will ***Ans: Be doubled***

19BT20241	Easy	Time constant of a capacitive circuit increases with ***Ans: Increase of capacitance and increase of resistance***