PPSC Physics Chapter 6 Electricity and Magnetism

Sr	Questions	Answers Choice
1	In a crystal lattice	A. Atoms are arranged in an order way B. Atoms are arranged in a random way C. Holes are arranged in an order way D. Electrons are arranged in an order way
2	In which form energy in an inductance coil is stored.	A. Heat energy B. Light energy C. Magnetic energy D. Nuclear energy
3	The dot product of electric intensity and area of a surface is equal to.	A. Magnetic flux B. Electric flux C. Motional emf D. Induced emf
4	Which of the following parameters is irrelevant for a fuse wire.	A. Its radius B. Current flowing through it. C. Its specific resistance D. Its length
5	The inductance in a coil plays the same role as	A. Inertia plays in machans B. torque plays in machines C. Energy plays in machines D. Momentum plays in machines
6	The combined effect of resistance and reactance's in A.C. circuit is called.	A. Resistance B. Conductance C. Choke D. Impedance
7	Materials that experience a force from stronger to weaker regions of magnetic field are called.	A. Non magnetic B. Paramagnetic C. Ferromagnetic D. Diamagnetic
8	For capacitors connected is series.	A. The difference of potential is same for an B. The charge on each is the same C. The resultant capacitance is greater than D. The charge on each is not the same
9	What is the power factors of wattles current.	A. Infinity B. Unity C. 0.5 D. Zero
10	Which equation in electromagnetism describe the magnetic field B generated by an electric current.	A. ampere's circuital law B. Bio savart law C. Gauss's law for electromagnetism D. Coulomb's law
11	What is the properly of materials that responds at an atomic or subatomic level to an applied magnetic field.	A. Magnetism B. electroplating C. Diamagnetism D. Electrolysis
12	The permeability of air is	A. 0.5 B. zero C. infinity D. Unity
13	A capacitor is prefect insulator for	A. Direct current B. Alternating current C. Direct as well as alternating current D. Pulsating current
14	The resistance offered by one cubic meter of a substance is known as.	A. Reactance B. Conductance

		C. Conductivity D. Resistivity
15	The unit of time constant RC is.	A. Second B. second-1 C. Second -2 D. Second 2
16	A resistor whose resistance decreases with increasing intensity is.	A. Light dependent resistor B. Thermistor C. Thermocouple D. Strain gauge
17	The process of converting A.C and D.C. is known as	A. Amplification B. _{Filtration} C. Rectification D. Saturation
18	Which of the following are sources of direct current.	A. Batteries B. Solare cells C. Thermocouples D. All of these
19	Capacitive reactance is measured in	A. Henrys B. Ohms C. mhos D. electron volts
20	The free electron theory explains conduction in	A. Insulators only B. Metals only C. Semi conductor only D. Non metals only
21	The cause of ferromagnetism is.	A. Orbital motion of elections B. spin Motion of electrons C. Permanent dipole memento D. Spin angular momentum
22	What is term for tendency of a system to oscillate with larger amplitude at some frequencies than at others.	A. Resonance B. Impedance C. Inductance D. Capacitance
23	A magnetic field is said to exist at a point if	A. A force is exerted on a charge placed at that point B. A magnetic pole exists at that point C. An ampersand current loop surrounds the point D. A force not felt by a static charge acts on a moving charge placed at that point
24	The sensitiveness of a moving soil galvanometer can be increased by	A. Decreasing the number of turns of the coil B. Decreasing the area of the coil C. Increasing the couple per unit twist of the suspension D. Increasing the magnetic flux
25	An Electric kettle should always be fitted with an earth connection as a protective device What is being protected by the earth connection.	A. The cable connecting the kettle B. The fuse in the circuit C. The heating element of the kettle D. The person using the kettle
26	Resistance and resistivity of a substance	A. Increase with rise in temperature B. Decrease with rise in temperature C. Remains same at every temperature D. Increases at high voltage
27	Which of the following is an electrostatic generator.	A. Winshurst machines B. Van de Graff generator C. Electrophorus D. All of the above
28	In a charged capacitor the energy resides	A. In the negative plate B. In the positive plate C. In the field between the plates D. Around the edge of the plates
29	High frequency radio wave is called	A. Fluctuate wave B. Carrier wave C. Matre wave D. Energetic wave
30	A straight copper wire a moved in a uniform magnetic field such that it cuts the magnetic lines of force then	A. emf will not be induced B. emf will beinduced C. sometimes emf will be induced and sometimes not

	lines of force then.	sometimes not D. The number of turns iin the coil increases
31	at room temperature the p.d. between the two sides of depletion region for silicon is of the order of.	A. 0.3 V B. 0.5 V C. 0.7 V D. 0.9 V
32	The force experienced by a unit positive charge at that point placed in an magnetic field is known as.	A. Electric field intensity B. Electric flux C. Electric potential D. Electric dipole
33	The SI unit of magnetic flux is	A. gauss B. Maxwell C. Oersted D. Water
34	In an induction coil, the secondary emf is.	A. Zero at the break of the circuit B. Zero during make of the circuit C. Very high during make of the circuit. D. Very high during break of the circuit
35	Why choke coil is used in an AC circuit.	A. To decrease D.C. B. To increases A.C. C. To decreases A.C D. To increase D.C
36	Conductance is the reciprocal of.	A. Capacitance B. Inductance C. Resistance D. Admittance
37	In which of the following eddy current is not used	A. Induction furnace B. Automobile speedometer C. Electromagnetic damping D. X- rays diffraction
38	Para magnetism is.	A. A distrotion effect B. An orientation effect C. A skin effect D. A resistance
39	If positive terminal of the battery is connected to n-type and negative terminal of the battery is connected to p-type then the diode is.	A. Saturated B. A gate C. Forward biased D. Revere biased
40	If we double both the current and the voltage in circuit while keeping its resistance constant the power.	A. Remains unchanged B. Halves C. Doubles D. quadruples
41	In open circuit electromotive force equal to	A. Current B. Resistance C. Voltage D. Inductence
42	Which of the following is an electrical insulator that can be polarized by an applied electric field.	A. Conductor B. Condenser C. Di electric D. Capacitor
43	The unit of magnetic induction is.	A. weber -metre B. weber -metre 2 C. weber-meter-2 D. weber-metre-1
44	Two magnetic lines of force	A. Out near the poles B. Never cut each other C. Cut at a neutral point D. Cut according to position of the magnet
45	At series resonance in L-C-R circuit the impedance is equal to.	A. Ohmic resistance B. Inductive reactance C. Capacitive reactance D. Inductive reactance minus capacitive reactance
46	What is the degree of magnetization of a material.	A. Susceptibility B. Ablitity C. Retentivity D. Capacity
		A. Spherical capacitor B. Parallel plate capacitor

47	A wire surrounded by a concentric cylindrical metal shield constitutes a.	B. Parallel plate capacitor C. Cylindrical capacitor D. Cylindrical condenser
48	In which of the following the loss of energy is less.	A. Direct current B. Alternating current C. Thermoelectricity D. Photoelectricity
49	Which of the following remains unaffected in a magnetic field.	A. a particles B. b partciles C. gama particles D. Electrons
50	The electric supply line in houses works at 220 V what will be the amplitude of emf.	A. 120 V B. 331 V C. 220 V D. 440 V
51	The best instrument used for the measurement of emf of a cell a	A. A voltimeter B. An ammeter C. A potentiometer D. Wheatstone bridge
52	Thermocouple is used for	A. Converting atomic energy into heat energy B. Measure the radiant energy C. Storing the heat energy D. Measuring current
53	Which device converts alternating current to direct current.	A. Motor B. Generator C. Transformer D. Rectifier
54	One weber is equal to.	A. N A-1 B. N m-1 A C. N mA-1 D. N m-1 A-1
55	For an A.C. circuit the power factor is	A. Always les than one B. Always greater than one C. Always equal to one D. Absent
56	Which one of the following instruments has the maximum resistance.	A. Ammeter B. Voltmeter C. Micro ammeter D. Milli ammeter
57	Why is an oxide coated filament used in vacuum tube.	A. It has a longer lime B. Irt can with stand high C. It emit electrons at low temperature D. It reduces the effect of space charge
58	A gallium atom is.	A. Monvalent B. Diavalent C. Trivalent D. Pentavalent
59	What is used in an electric circuit to allow current in one direction only.	A. A fuse B. An ammeter C. A diode D. A relay
60	If a di electric is placed between the plates of a capacitor, its capacitance.	A. Decreases B. Increases C. Remains unaffected D. Is zero
61	Which one of the following solids exhibits only shot range order.	A. Amorphous solids B. Polymeric solids C. Crystalline solids D. Metals
62	The mains frequency in Pakistan is	A. 20 Hz B. 50 Hz C. 40 Hz D. 60 Hz
63	The charge on an Isolated conductor always lies.	A. Within the conductor B. At the centre of the conductor C. On the surface of the conductor D. Outside the surface of the conductor
64	Super conductor are used in	A. Fast computer chips B. Magnetic resonance imaging C. Magnetic levitation trains

		C. Magnetic levitation trains D. All of the above
65	On which of the following parameters the amount of charge that can be placed on a conductor does not depend on.	A. Its capacitance B. Its size or shape C. its potential D. Dielectric strength of the surrounding medium
66	In gases, the charge carriers are.	A. Atoms B. Molecules C. Electrons only D. Ions and electrons
67	The terminals of a battery are joined by a length of resistance wire Which change on its own will increase the current though the battery.	A. Connecting the wire with plastic insulation B. Covering the wire with plastic insulation C. Using a shorter wire of the same material and the same thickness D. Using a thinner wire of the same material and the same thickness
68	The highest value reached by the voltage or current in one cycle is its.	A. Top value B. Maximum value C. Average value D. Peak value
69	Two pure inductors each of self inductance L are connected in parallel The total inductance of the combination is.	A. L B. 2L C. L/2 D. L/4
70	In a series resonant circuit, the current at resonance is.	A. Maximum B. Minimum C. Zero D. Sometimes maximum and sometimes minimum
71	Which part of a simple D.C. motor reverses the direction of current through the coil every half cycle.	A. the armature B. The commutator C. the brushes D. The slip rings
72	In a half wave rectifier the rms value of the A.C. component of the wave is.	A. Less than D.C. value B. Great her than D.C. value C. Equal to D.C. value D. Zero
73	When a current of 2 A flows for 5 s through a lamp 120 W of power are used How much charge flows through the lamp.	A. 10 C B. 12 C C. 24 C D. 60 C
74	The permeability of a diamagnetic material is	A. Greater than unity B. Less than unity C. Equal to unity D. Zero
75	Photo diodes are used as	A. Optical fibre receivers B. Automatic switching C. Logic circuits D. All of the above
76	A charged capacitor has charge on its	A. Outside surface B. Inner surface C. Surroundings D. Mid point
77	When current in an inductor is increasing	A. energy is lost B. Energy is being stored in the magnetic field of the inductor C. Energy is being drained from the magnetic field of the inductor D. Eddy current is produced
78	Coulomb found that the mutual force between tow electric charges varies.	A. Inversely as the distance B. Inversely as the square of the distance C. directly as the distance D. Directly as the distance squared
79	The time constant of a RL circuit is.	A. L/R B. LR C. R/L D. L2/R
80	Which one of the following represents an ohm.	A. Volt per ampere B. Joule per second

		C. Watt per ampere D. Joule per coulomb
81	Electric Heater operates on the principle of.	A. electromagnetism B. Electromagnetic induction C. Electrolysis D. Momentum
82	When the number of turns in the solenoid is doubled without any change in teh length of the solenoid its self inductance will be.	A. Halved B. Doubled C. 4 times D. 8 times
83	Transformer make possible the	A. transmission of A.C. power B. conversion of AC and D.C C. Cyclotron D. Particle accelerator
84	The ration of intensity of magnetization to the magnetic force is known as.	A. Parmeability B. Magnetic induction C. Magnetic intensity D. Magnetic susceptibility
85	The emf induced by the motion of a conductor across a magnetic field is called.	A. Absolute potential B. Motional emf C. Induced emf D. Terminal potnetial
86	In a simple D.C. motor the direction of current in the motor is reversed every half revolution to keep the motor turning in the same direction which part of the motor does this.	A. Brushes B. Coil C. Commutator D. Poles
87	Select the one that is not a donar	A. P B. AS C. Sb D. In
88	As a result of modulation, the resultant wave is called.	A. Carrier wave B. Modulated carrier wave C. Matter wave D. Energetic carrier wave
89	When the battery is being charged its terminal potential difference than its emf is.	A. Less B. Greater C. Double D. Squared root
90	The current passing through the coil of a galvanometer is directly proportional to	A. Resistance B. voltage C. Angle of deflection D. conductance
91	A junction between P-Type and n-type materials is called.	A. Ampilifier B. Transistor C. Rectifier D. Diode
92	The current passing through the switch s will be	A. Zero B. 3 A C. 4.5 A D. 10 A
93	The building up of electric charge on the surface of objects is termed as.	A. Static electricity B. Electric charge C. Electric current D. Electrostatic induction
94	A bulb of 100 W is connected to a 160 V supply What will be the power consumed.	A. 25 W B. 30 W C. 50 W D. 64 W
95	A device which converts electrical energy into mechanical energy is called.	A. A.C generator B. D.C. generator C. Motor D. Commutator
96	On which factor the self induction does not depends upon.	A. Number of turns of the coil B. the core material C. Weight of the coil D. Area of the cross section of the coil
97	An inductor may store energy in	A. Its magnetic field B. Its electric field C. Its coils D. A neighboring circuit

98	What is a measure of the separation of positive and negative electrical charges in a system of charges.	A. charge polarization B. Electric dipole moment C. Electric field D. Electrostatic induction
99	Why does a transformer have a core made of iron.	A. Iron has a high melting point B. Iron is a magnetic material C. Iron potential and high current D. Iron is a conductor of electricity
100	The separation between the plates of a parallel plate capacitor with original capacitance C is doubled its present capacitance will be.	A. 1/4 C B. 1/2 C C. 2C D. 4 C
101	Electromotive force is closely related to.	A. Inductance B. Magnetic flux density C. Potential difference D. Electric field intensity
102	An electric Heater and a fan are marked 1000 W, 250 V and 100 W , 220 V respectively The resistance of fan is.	A. Equal to that of heater B. Greater than that of heater C. Less than that of heater D. Zero
103	House hold circuits are mostly	A. Wired in sires B. Wired in parallel C. Made using wires of gold D. Made using wires of silver
104	When $X_C = X_l$, this condition is called.	A. Equality B. Balanced C. Resonance D. Equlibrium
105	An ammeter can be converted into a voltmeter by connecting a	A. Low resistance i series B. High resistance in series C. High resistance in parallel D. Low resistance in parallel
106	A straight wire carrying current will experience a force when placed in a uniform magnetic field if	A. The current and field are parallel B. The current and field are at an angle C. the current and field are parallel in opposite directions D. All of the above
107	What type of current is produced by batteries.	A. Direct current B. Alternating current C. Pulsating current D. Convection current
108	A heater which is to be used on a 250 V mains circuit, has a 5 A fuse in its plug Which of the following is the most powerful heater that can be used with this fuse.	A. 150 W B. 500 W C. 1,000 W D. 2,000 W
109	What is the power factor of LR circuit.	A. Unity B. Zero C. infinity D. Between 0 and 1
110	A resistance is a device which	A. Acids the flow of current is a circuit B. Converts electrical energy to heat C. Is a type of charge pump D. Is like a switch
111	When a positive charge is allowed to move from positive to negative plate, then it will gain	A. P.E. B. K.E C. Gravitational energy D. Electrical P.E.
112	Which electrical quantity has the same units as electromotive force.	A. Charge B. Current C. Potential difference D. Power
113	Which quantity is not affected by a magnetic field.	A. Moving charge B. Stationary charge C. Current flowing in a conductor D. Charge in magnetic flux
114	Which of the following has teh maximum permeability.	A. Paramagnetic substances B. Ferromagnetic substances C. Diamagnetic substances D. Iron oxide
		A. Leads the current by 90 ^o in phase

115	The instantaneous voltage across a pure inductance.	⁰ in phase B. Lags the current by 90 ^o in phase C. Is in phase with the current D. Leads the current by a phase angle which depends on the frequency
116	Which factor remains constant in a transformer.	A. Current B. Voltage C. Power D. Frequency
117	Coulomb's law for the electrostatic force between two electric charges resembles the	A. Law of conservation of energy B. Law of conservation of mass C. Newton's law of gravitation D. Newton's law of motion
118	Magnetic lines of force due to earth's horizontal magnetic field are.	A. Curved lines B. Elliptical C. concentric circles D. Parallel and straight
119	When a conductor situated in a dielectric is charted the energy resides.	A. Only on the dielectric B. Only on medium surrounding charge C. On the dielectric and medium both D. Only on the type of the charge
120	Since selenium becomes conductor in light so it is.	A. Photoconductor B. Photocell C. Thermistor D. Photodiode
121	If the current in a wire which is placed perpendicular to a magnetic fields increases the force on the wire.	A. Increases B. Decreases C. Remain the same D. Will be zero
122	Force acting on a test charge between the plates of a parallel plate capacitor is F. If one of the plates is removed teh force on the same test charge will be.	A. Zero B. F/2 C. F D. 2 F
123	Induced current in a circuit depends upon	A. The speed with which the conductor moves in the magnetic field B. Resistance of the loop C. Direction of the loop D. Shape of the loop
124	The power dissipation in a pure inductive or capacitive circuit is.	A. Maximum B. Minimum C. Zero D. Infinity
125	As electric field intensity is a potential gradient, if may be expressed ni the units of NC-1 or	A. volt B. Volt metre C. Volt per metre D. Joule
126	The strength of the magnetic field around the current carrying conductor is	A. Smaller near the conductor B. Greater near the conductor C. constant everywhere D. Changing everwhere
127	A generator produces 100 kW of power of a potential difference of 10 kV the power is transmitted through cables of total resistance 5 Homs How much power is dissipated in the cables.	A. 50 W B. 250 W C. 500 W D. 5,000 W
128	A step up transformer has a turn ratio of 1:100 A voltage of 20 V is connected across the primary coil What is the secondary voltage.	A. 0.2 V B. 5 V C. 100 V D. 2000 V
129	Ohm's law is applicable to	A. Ohmic and non ohmic devices only B. Semiconductors only C. Metals only D. Insulators only
130	What is the power rating of a lamp connected to a 12 V source when it carries 2.5 A.	A. 4.8 W B. 14.5 W C. 30 W D. 60 W
131	The resistance of a capacitor when it is connected with a battery is.	A. Zero B. Finite C. Infinite D. The same

132	Self inductances of solenoid is	A. Directly proportional to the current flowing through the wire B. Directly proportional to its length C. Inversely proportional to area of corss section D. Directly proportional to number of turns
133	The value of magnetic field strength for parament magnets is.	A. Unity B. Infinity C. Zero D. Two
134	The measure of how strongly a material oppose the flow of electrical current is known as	A. Electrical resistivity B. Specific electrical resistivity C. Volume resistivity D. All of the above
135	The phenomenon of exactly zero electrical resistance occurring in certain materials below a characteristics temperature is called.	A. Resistivity B. Conductivity C. Super conductivity D. Volume resistivity
136	The speed of the charging or discharging a capacitor depends upon the product of resistance and.	A. Current B. Voltage C. Capacitance D. Potential difference
137	Which one of the following describes a measure of opposition to alternating current.	A. Electrical impedance B. Capacitance C. Inductance D. Admittance
138	Slip Rings are used in	A. D.C. dynamo B. A.C. dynamo C. Transformers D. Battries
139	When a diamagnetic substance is inserted in a current carrying coil the magnetic field is	A. Decreased B. Increased C. unchanged D. Increased or decreased, depending upon the relative volume of the substance
140	The ratio of the rms value of the applied voltage to the rms value of resulting A.C. is called.	A. Reluctance B. Impedance C. Reactance D. Resistance
141	The value of electric field intensity is.	A. Volt B. Coulomb C. Newton D. Newton coulomb
142	In the experiment of force on a current carrying conductor in a uniform magnetic field the magnitude of force depends upon which factor.	A. Force is inversely proportional to current B. Force is directly proportional to current C. Force is inversely proportional to voltage D. Force is directly proportional to voltage
143	if two conductors in the same vicinity each possess one coulomb of charge of opposite sign when one volt potential difference in established between them we may say they possess	A. A capacitance of one henry B. An inductance of one henry C. An impedance of one ohm D. A capacitance of one farad
144	In the equation P = IV cos Theta Cos theta is known as	A. Phase angle B. Liming angle C. Phase D. Power factor
145	Which of the following can be used to calculate electrical power.	A. Current x resistance B. Potential difference x current C. Potential difference / current D. Potential difference /resistance
146	Which of the following statemtents is worng.	A. Charge is quantized B. Charge is conserved C. There is not field near an isolated charge at rest D. A moving charge produces both electric and magnetic field.
147	If the output voltage is not smooth but pulsating then it can be made smooth by using a	A. Filter B. Gate

147	circuit known as.	C. shunt D. Fuse
148	The distribution of electrical charge i an object caused by teh influence of nearby charges is called.	A. Electric potential B. Electrostatic induction C. Electric flux D. Electric dipole moment
149	An electrical source with internal resistance's' is said to operate a lamp of resistance R what fractions of the total power is delivered to the lamp.	A. R+r/R B. R-r/R C. R/R+r D. r/R-r
150	When the frequency of A.C in L - C- R circuit is incrased the impedance of L-C-R circuit.	A. Increase B. Decrease C. Remain unchanged D. First decrease and then increases
151	The resistance of a wire does not depend upon.	A. Area of cross section of the wire B. Length of the wire C. Temperature of the wire D. Current passing though the wire
152	What is the voltage a 6 Mega resistor when 3 A of current passes through it.	A. 2 V B. 9 V C. 18 V D. 36 V
153	In L - C parallel circuit the coil draws a.	A. Lagging current B. Leading current C. Lagging voltage D. Leading voltage
154	Lines of force are imaginary lines drawn so as to be energy point.	A. parallel to equipotential surface B. Normal to the electric field C. Indicative of the position of the nearest source charge D. Tangent to the electric field
155	The potential difference between two points is equal to the difference of	A. Kinetic energy B. potential energy C. Electric current D. Charge energy
156	The electromagnetic waves propagated outing space from antenna of a transmitter are known as.	A. Infrared waves B. Light waves C. Radio waves D. X-rays
157	In a purely inductive circuit, the current	A. Lags behind the emf by 90^o B. Leads the emf by 90 ^o C. Is in phase with emf D. May lag or lead the emf
158	The relation between the voltage and current that flows in a resistor is.	A. V = 1/R B. R = vi C. V = I2 R D. I = V /R
159	Which current can pass through a capacitor continuously.	A. Alternating current B. Direct current C. Eddy current D. Pulsating current
160	in the region where the field lines are parallel and equally spaced, the field is.	A. Zero B. Unirorm C. Non uniform D. Negative
161	An object gain excess negative charge after being rubbed against another object which is.	A. Neutral B. Negatively charged C. Positively charged D. either a, b, or c
162	An important application of the semi conductor is the	A. Vacuum tube B. Fluroescent tube C. Copper oxide rectifier D. Battery
163	Which of the following defines P.E. per unit charge.	A. Electric current B. Charges C. Potential D. Electric field
164	A torch bulb uses a 3 V supply and makes a current of 0.2 A It is switched on for one minute How much electrical energy is used.	A. 0.6 J B. 12 J

	How much electrical energy is used	C. 24 J D. 36 J
165	The cathode ray oscilloscope is used for	A. Displaying the waveform of given voltage B. Displaying the wave form of given vibrations C. Rectifying a.c to d.c. D. Rectifying D.C. to A.C.
166	When a direct current is passed though a junction formed of two dissimilar metals the junction becomes warmer or cooler depending on the.	A. Current direction B. Thermocouple used C. Temperature gradient D. Amount of current
167	When a magnet is moved into the coil of wire there is a small reading on the galvanometer Which change would increase the size of the reading.	A. Pushing in the S-pole B. Pulling the magnet out C. Unwinding some of the turns of wire D. Moving the magnet faster
168	What happens to the energy of a charged condenser is plate separation is increased.	A. It decreases B. It increases C. It becomes zero D. It remains unchanged
169	The presence of a magnetic field can be detected by a	A. Small mass B. Stationary positive charge C. Stationary negative charge D. Magnetic compass
170	The patch followed by charge in an electric field is.	A. Circular B. LInear C. Parabolic D. Zig zag
171	Which one fo the following is based on the diffraction and repulsion of electric charge.	A. Capacitor motor B. Transformer C. Induction motor D. synchronous motor
172	The current passing across a p-n junction due to minority charge carriers is called	A. Reverse current B. Forward current C. Leakage current D. Both a and b
173	A battery drives 50 C of charge round a circuit. The total work done is 750 J What is the electromotive force of the battery.	A. 0.07 V B. 15 V C. 700 V D. 1500 V
174	In the circult, the ammeter reading is 0.5 A . If the resistance of the voltmeter is 180Ohm What is the voltmeter rediang.	A. 90 V B. 100 V C. 180 V D. 900 V
175	A resistor connected to a battery is heated due to current passing through it. Which of the following quantity does not change.	A. Resistivity B. Resistance C. Number of free electrons D. Drift velocity
176	What is the value of earth's magnetics fields.	A. 5 G B. 50 G C. 100 G D. 500 G
177	The rms value of emf in a circuit is given by a factor of.	A. 0.637 B. 0.7 C. 0.707 D. 1.11
178	In an A.C. circuit the current.	A. Is in phase with voltage B. Leads the voltage C. Lags the voltage D. Any of these depending upon the circumstances
179	At low frequency the value of resistance of certain capacitors is.	A. small B. Large C. Moderate D. Unmeasurable
180	Efficiency of a half wave recitifier is.	A. Almost negigible B. More than full wave rectifier C. Less than full wave rectifier D. Equal to full wave rectifier
181	On which of the following parameters capacitance does not depend upon	A. Area of the plates B. Medium between the plates

181	On which of the following parameters capacitance does not depend upon.	C. Distance between the plates D. Nature of material for plates
182	The effective resistance offered by the resistance capacitance and inductance in an A.C. circuit is known as	A. Impedance B. Resistance C. Capacitance D. Reactance
183	Generally, electrical resistivity of intrinsic semiconductors decreases with increasing.	A. Pressure B. Volume C. Temperature D. Density
184	The phase angle between the voltage and current is A.C. circuit though a resistor is.	A. 0 ^o B. 45 ^o C. 90 ^o D. 180 ^o
185	What does the electricity meter record.	A. Charge B. Current C. Energy D. Power
186	The charge per unit volt which is a constant property of the system is known as the	A. Dielectric constant B. Permitivity C. Capactance D. Inductance
187	An alternating current can be produced by	A. Turbine B. Electric motor C. Generator D. Trnasormer
188	When ever current is drawn from a cell Its terminal potential difference and emf become	A. Different B. Same C. Zero D. Negative
189	The impedance of a pure anti resonant circuit at resonance is.	A. Zero B. Unity C. Infinity D. 0.5
190	The process of mixing sound waves with carrier waves is known as.	A. Rectification B. amplification C. Modulation D. Demodulation
191	A transformer is used to.	A. Convert D.C. into A.C. B. Convert A.C. in to D.C. C. Obtain A.C. voltage D. Enhance the power
192	Which of the following is not an application of diodes.	A. A filters B. Bridge rectifier C. Half wave rectifier D. Full wave rectifier
193	The capacitance of a capacitor increases with a decreases in.	A. Plate area B. Permitivity C. Plate separation D. Dielectric constant
194	Which materials have exactly zero electrical resistivity.	A. Metals B. Insulators C. Semi conductors D. Super conductors
195	Magnetic fields do not interact with	A. Stationary electric charges B. Stationary permanent magnets C. Moving electric charges D. Moving permanent magnets
196	A choke coil is a coil with	A. Low inductance and low resistance B. Low inductance and high resistance C. High inductance and low resistance D. Low inductance and negligible resistance
197	A plug connoted to a table lamp contains a 3 A fuse Why is the fuse needed.	A. To increase the resistance of the circuit B. To make it easier for the current to flow C. To protect the wiring form overheating D. To reduce the voltage across thelamp

198	A substance which has empty conduction band.	A. Insulator B. Conductor C. Semi conductor D. super conductor
199	The negative of the potential gradient is	A. Potential energy B. Electrostatic force C. Electric field intensity D. Electromotive force
200	On which parameter the time required to charge a capacitor depends upon.	A. magnitude of charge B. Applied potential difference C. Capacitances D. Time constant
201	A system of the equal and opposite point charges separated by a small distance is called.	A. A capacitor B. A dipole C. An iinductor D. A di electric
202	When a balloon sticks to the whiteboard It is an example of.	A. Conoduction B. Induction C. Polarization D. Conservation of charge
203	Object may acquire an excess or deficiency of charge by	A. Rubbing them together B. Grounding them C. Applying coulomb's principle D. Shielding them
204	How are the electrons produced in a cathode ray tube.	A. By applying an electric field to the x plates B. By heating a metal filament C. By ionization of the air D. By radioactive decay
205	The process due to which current flows only during alternate half cycle is known as.	A. Filtration B. saturation C. Half wave rectification D. Full wave rectification
206	Where is the velocity of electrons maximum in a diode.	A. Near the cathode B. Near the anode C. In the space ini between the two elecrode. D. It is same throughout the tube
207	The sensitivity of the galvanometer can be increased by increasing the	A. Number of turns of the coil B. Area of the coil C. Strength of the magnetic field D. All of the above
208	Faraday's law deals with	A. Induced emf B. Motional emf C. Induced current D. Electric current
209	What happens to a soap bubble, when some charge is given to it.	A. It collapses B. It increases in size C. It decreases in size D. It feels nothing
210	One Tesla is equal to.	A. 1 N A-1 B. 1 N m-1 C. 1 N A -1 m D. 1 N A -1 m-1
211	A 800 W toaster and a 1.3 kW frying pan are plugged into the same 120 V lines, then	A. Fuse will not blow B. Fuse will blow C. Supply will spark D. Only toaster can work
212	The combined resistance of two identical resistors, connected in series is 18 Mega Their combined resistance in a parallel arrangement will be.	A. 2 Mega B. 4 Mega C. 8 Mega D. 12 Mega
213	Electricity is transmitted at high voltage rather than at low voltage because.	A. It is generated at high voltage B. It is safer C. It requires less insulation D. It wastes less energy
214	A forward based p-n semiconductor diode is called.	A. Photodiode B. Photovoltaic cell C. Amplifier D. Ligh emitted diode

215	All the magnetic materials lose their magnetic properties when	A. Dipped in oil B. Dipped in water C. Heated D. Cooled
216	The magnetic field inside a solenoid is	A. Zero B. Infinite C. Uniform D. Non uniform
217	A charge less region which separates p-type and n-type semiconductors in a p-n junction is known as.	A. Polar region B. Null region C. Depletion region D. Neutral region
218	Which electrical component uses a low current circuit to switch a high current ON or OFF.	A. Capacitor B. Diode C. Reed rely D. Thermistor
219	The typical value of forbidden energy gap in germinium is.	A. 0.7 eV B. 1.0 eV C. 1.4 eV D. 10 eV
220	The direction of induced emf during electromagnetic induction can be determined by making use of.	A. Faraday's law B. Ampere;s law C. Lenz's law D. Laplace law
221	The value of mutual inductance can be increased by	A. Decreasing number of turns in the coil B. Increasing number of turns in the coil C. Winding the coil on china clay D. Winding the coil on wooden frame
222	In which form energy is stored in acondenser.	A. Electric energy B. Potential energy C. Kinetic energy D. Magnetic energy
223	Wattles current is said to flow when phase angle between virtual current and virtual voltage is	A. 0^o B. 90 ^o C. 180 ^o D. 270^o
224	If a person winds a coil of wire around a steel rod and then passes an electric current through the wire then the	A. Steel rod becomes an electromagnet B. Steel rod becomes hot C. Wire becomes magnetized D. wire becomes demagnetized
225	For which material magnetic susceptibility is negative.	A. Paramagnetic B. Diamagnetic C. Ferromagnetic D. All of these
226	The value of voltage or current that exists in a circuit at any instant of time measured from some reference point is its.	A. Peak value B. Peak to peak value C. Instantaneous value D. Average value
227	In the direction indicated by an electric field line.	A. The electric field strength must increases B. The electric field strength must decreases C. The potential must remain constant D. The potential must decreases
228	What happens to the intensity or the brightness of the lamps connected in series as more and more lamps are added.	A. Increases B. Decreases C. Remains the same D. Cannot be predicted
229	What for is a modulator circuit used.	A. To eliminate carrier waves B. To superpose the radio frequency signal on the carrier waves C. To transmit the signal D. To create sound waves
230	The minimum value of charge on any object is.	A. 1.6 x 10⁻²⁹ C B. 1.6 x 10⁻¹⁹ C C. 1.6 x 10⁻⁹ C D. 1 C
231	A steel of which material should be placed between the plates of a parallel plate capacitor in	A. tin B. Iron

	order to increase its capacitance.	C. Copper D. Mica
232	An electric current in conductors is due to the flow of.	A. Positive ion B. Negative ion C. Positive charges D. Free electrons
233	Which of the following a natural example of a capactor.	A. Fire B. Snow C. Air D. Lightining
234	In L-C parallel circuit the capacitor draws a	A. Lagging current B. Leading current C. Lagging voltage D. Leading voltage
235	How the small bulbs used for decoration purposes are connected.	A. In parallel B. In series C. In mixed order D. In vertical position
236	What is the traditional name for a capacitor	A. Choke B. Condenser C. Transformer D. Inductor
237	Inductance divided by resistance and the product of capacitance and resistance both have units of.	A. Charge B. Time C. Force D. Current
238	In comparison with the electrostatic force between two electrons the electrostatic force between two protons is.	A. Zero B. Smaller C. Greater D. Same
239	What does a dynamo generate	A. Electrons B. Emf C. anion D. Cation
240	With high frequencies capacitive reactance	A. Increases B. Decreases C. Becomes double D. Becomes half
241	Inductance are measured in	A. Coulombs B. Volts C. Henrys D. Farads
242	Which of the following is not a ferromagnetic materials.	A. Iron B. steel C. Copper D. Cobalt
243	What units are used to rate electrical fuses.	A. Volts B. Ampere C. Watts D. Hertz
244	An ideal voltage source has zero.	A. Current B. Electromotive force C. Voltage D. Internal resistance
245	Which is the fundamental quantity in electrostatic.	A. Electric charge B. Electric potential C. Electric field D. Electric field intensity
246	In any L-C-R circuit	A. Current lags the applied voltage B. Current leads the applied voltage C. Current sometimes leads and sometimes lags the applied voltage D. Current remains in phase with voltage
247	A transformer is needed to convert a mains 240 V supply into a 12 V supply it there are 200 turns on the primary coil, how many turns should there be on the secondary coil.	A. 100 B. 200 C. 400 D. 600
248	At high frequency the current through a capacitor will be	A. Small B. Zero C. Large D. Infinity

		D. Infinity
249	Which one of the following is diamagnetic	A. Liquid oxygen B. Air C. Water D. Copper sulphate
250	Which law states that an induced current is always in such a direction as to oppose the motion or change causing it.	A. Ampere's law B. Gauss's law C. Lenz's law D. Kirchoff's law
251	Capacitance is directly proportional to	A. Distance between the plates B. Di electric strength C. Area of the plates D. Charge multiplied by the applied voltage
252	The doped semi conductor materials are called	A. Pure semi conductors B. Poor semi conductors C. Super conductors D. Extrinsic semiconductors
253	Such substance which undergo plastic deformation until they break are known as.	A. Diatomic substances B. Monoatomic substances C. Ductile substances D. Brittle substances
254	Alternating current generator consists of a coil and a pair of.	A. Split rings B. Slip rings C. Metal rings D. Copper rings
255	A positive and a Negative charge are initially 4 cm apart When they are moved closer together so that they are now only 1 cm part the force between them is.	A. 4 times smaller than befor B. 4 times larger than before C. 8 times larger than before D. 16 times larger than before
256	The source of magnetic field are	A. Isolated magnetic poles B. Electric charge distributions C. Current loops D. Solenoids
257	On which principle the induction coil works on.	A. Self induction B. Ampere's rule C. Mutual induction D. Gauss's law
258	When impurities are added to metals they	A. Will decrease the elasticity B. Will increases the elasticity C. Will not change the elasticity D. Will or will not change the elasticity
259	An uncharged di electric body experience a force when placed in an electric field if.	A. A field in non zero at the body B. The electric is a polar material C. The dielectric is a non polar material D. The field is non uniform over the body
260	A material in which resultant magnetic moment is zero.	A. Diamagnetic B. Paramagnetic C. Ferromagnetic D. Anti ferromagnetic
261	The Lenz's law is also a statement of the law of conservation of.	A. Energy B. Mass C. Momentum D. Torque
262	The resistance of a coil changes directly with	A. The current of A.C. B. The frequency of A.C C. The inductance D. Both B and C
263	When a charged rod is brought near bits of dry cork dust The dust will.	A. Cling firmly to rod B. Be replied from the rod C. Attract itself to the rod a first and then fly off D. Be repelled at first and then be drawn to the rod
264	Artificial polymers are made by a chemical reaction known as.	A. Crystallization B. Electroplating C. Polymerization D. Polarization
		A. N m-1 B. V A

265	What can be used as the unit of envery.	C. W.s D. V C-1
266	Which of the following material could be used for a high vacuum, high voltage tube.	A. Thoriated tungsten B. Tungsten C. Copper D. Cesium
267	The rectangular coil in galvanometer is made up of.	A. Bare copper wire B. Insulated aluminum wire C. Enameled copper wire D. Enameled steel wire
268	Which of the following materials has highest magnetic suscaptibility.	A. Uranium B. aluminium C. Platinum D. Sodium
269	Which is not the strongest and the most familiar type of magnetism.	A. Diamagnetism B. Para magnetism C. Ferromagnetism D. All of these
270	Inserting a di electric between the plates of a charged parallel plate capacitor.	A. Decrease the capacitance B. Leaves teh capacitance the same C. Encourages breakdown between the plates D. Reduces the electric intensity between the plates
271	At which temperature a ferromagnetic material is converted into a paramagnetic one.	A. curie temperature B. Boyle's temperature C. Natural temperature D. Neutral temperaturre
272	Which of the given factors is increased in a step down transformer.	A. Voltage B. Current C. Wattage D. Resistance
273	When forwarded bias is applied to a junction diode it.	A. Increases the potential barrier B. Decreases the potential barrier C. Reduces the majority carrier current to zero D. Reduces the minority carrier current to zero
274	The electric bulb does not obey Ohm's law because.	A. Current changes B. Resistance changes C. Heat is produced D. All of these
275	What is the effect on the product of resistivity and conductivity if the temperature of a conductor is increased.	A. It decreases B. It increases C. It remains the same D. It may increase or decrease
276	Tesla is the unit for measuirng	A. Magnetic intensity B. Magnetic induction C. Magnetic moment D. Electric potential
277	Which law states that magnetization is inversely proportional to temperature for a fixed value fo the field.	A. Curie's law B. Voltmeter C. Ammeter D. Wattmeter
278	The sum of positive and negative peak values are usually written as.	A. rms value B. p-p value C. Peak value D. Instantaneous value
279	The maximum field that a dielectric material can with stand whiteout breaking down is called its.	A. Di electric strength B. Magnetic strength C. Capacity D. Resistance
280	The Step up transformer	A. Increase the input current B. Increases the input voltage C. Has more turns in the primary coil D. Has less time in the secondary coil
281	How eddy current losses are reduced in A F and R F transformers.	A. By using air cores B. By using shell cores C. By using laminated cores D. By using ferrite cores
		A. Charge

282	Which of the following quantities is analogous to mass in electricty.	B. Potential C. Capacitance D. Inductance
283	Current in an electrolyte is carried by.	A. Electron only B. Anions only C. Citations only D. Mesons only
284	A vacuum diode conducts when plate	A. Is negative w.r.t cathode B. Is positive w.r.t. cathode C. and cathode are at the same potential D. Resistance is less
285	A radio tuning capacitor is.	A. Cylindrical capacitor B. Spherical capacitor C. parallel plates capacitor D. Cylindrical condenser
286	A charge kept at the centre of a shell The shell has charge Q and radius R The force on the central charge due to shell is	A. in the upward direction B. Towards left C. Towards right D. Zero
287	The coulomb's law is valid for the charges which are.	A. Moving and point charges B. Moving and non point charges C. Stationary and point charges D. Stationary and large size charges
288	No current flows between two charged bodies when connected if they have same.	A. Charge B. Capacity C. Potential D. Shape
289	The eight most common element in the universe by mass is	A. Ge B. C C. Si D. As
290	The susceptibility of a paramagnetic material is	A. negative B. Positive C. Zero D. Infinity
291	If the source of emf is traversed from negative to positive terminal the potential charge.	A. Is negative B. Is positive C. Is zero D. Remain the same
292	Two unchanged objects A and B are rubbed against each other, when object B is placed near a negatively charged object C the two objects repel each other Which of these statements is true abut object A.	A. It remains uncharged B. It becomes positively charged C. It becomes negatively charged D. It is unpredictable
293	In alternating current circuits the quantity which plays the same role as resistance in direct current circuits is called.	A. Reactance B. Admittance C. Conductance D. Impedance
294	The electric field intensity of a point charge varies.	A. Directly as the square of the distance from the charge B. Directly as the square of the charge C. Inversely as teh distance from the charge. D. Inversely as the square of the distance from the charge
295	A germanium atom is	A. Monovalent B. Diavalent C. Travalent D. Tetravalent
296	If we make the magnetic field stronger the value of induced emf is.	A. Decreased B. Increased C. Vanished D. Kept constant
297	The device in the circuit that consume electrical energy are known as.	A. Resistors B. Capacitors C. Fuses D. Load
298	The ratio of average induced emf to the rate of changing of current in the coil is called.	A. Self induction B. Mutual induction C. Self inductance D. Mutual inductance

299	If a resistance is connected in parallel with a galvanometer the resulting instrument is called.	A. A voltmeter B. An ammeter C. A wattmeter D. A potentiometer
300	When a pentavalent material like arsenic is added to a tetravalent material such as germanium, we get a.	A. n-type material B. p -type material C. diode D. super conductor
301	In rectifiers silicon junction diodes are preferred to germanium type because.	A. They are cheaper B. They are durable C. Their much lower reverse current makes them more efficient D. Of their geometry
302	The force on a point charge due to electromagnetic fields is called.	A. Lorenz force B. Gauss's force C. Newton's force D. Ampere's force
303	The long distance transmission of electrical energy is done at.	A. High potential and low current B. High potential and highs current C. Low potential and high current D. Low potential and low current
304	Which of the following is an example of diamagnetic substances.	A. Nickel B. Chromium C. Antimony D. Cobalt
305	Which of the following quantity in analogous to temperature in electricity.	A. Charge B. Resistance C. Inductances D. Potential
306	Thermocouple is combination of.	A. Thermocouples B. Capacitors in parallel C. Resistors in series D. Ammeter and voltmeter
307	Which of the following is most suitable for the core of the electromagnetism	A. Air B. Steel C. Su Ni allow D. Soft iron
308	Direct current generators use.	A. Coiled rings B. Split rings C. slip rings D. solenoid rings
309	Electrical energy is transmitted at high alternating voltages which of the following is not a valid reason for doing this.	A. At high voltage a.c is safer than d.c. B. For a given powers, there is lower current with higher voltage. C. There is a smaller energy loss at high voltage and lower current D. The transmission lines can be thinner with a lower current.
310	Such an inductor coil which does not consume energy and is often employed for controlling A.C. without consumption of energy is called.	A. Reactance B. Choke C. Impendence D. Diode
311	A pure choke consumes	A. No power B. Maximum power C. Minimum power D. Average power
312	The unit of electrochemical potential is.	A. J mol-1 B. volt C. J C-1 D. Mol J-1
313	A semiconductor diode conducts only when it is	A. Not biased B. Zero biased C. Reverse biased D. Forward and biased
314	When a charged particle moves through a magnetic field it suffers a change in its	A. Charge B. Mass C. Energy D. Direction of motion
315	In modulation, low frequency signal is called	A. Fluctuated signal B. Loaded signal C. Modulated signal D. Harmonic signal

316	A magnet is pushed horizontally towards a coil of insulated wire inducting an emf in the coilin which direction does the coil try to move.	A. Downwards B. Upwards C. Away from the magnet D. Towards the magnet
317	A preset or trimmer can be a.	A. Variable resistor B. Variable capacitor C. Variable inductor D. All of these
318	A heat sensitive resistor is called.	A. Thermistor B. Varibale resistor C. Fixed resistor D. Zero resistor
319	Which of the following is the ability to hold an electric charge in electromagnetism.	A. Resistance B. Impedance C. Inductance D. Capacitance
320	In a galvanometer the enameled copper wire is wound on.	A. An insulator B. A non magnetic material C. A magnetic material D. A conductor
321	If emf of the battery in a thermocouple is doubled, what is the rate of heat generation at one function.	A. Remains unchanged B. Becomes half C. Become double D. Becomes 4 times
322	Why an ammeter is always connected in series in a circuit.	A. Its resistance is very high B. Its resistance is very low C. its resistance is infinity D. It does not draw current from the circuit
323	The spacing of electric field lines between two identical point charges of opposite signs	A. Is not indication of the field direction B. Is not dependent on the magnitude of the charges C. Is an indication of the field strength D. Is large when the charges are very large
324	Since a diode permits the flow of current only in one direction so it can be used as.	A. An oscillator B. A rectifier C. A phot deflector D. A transistor
325	A pure capacitor is connected in an AC circuit The power factor of the circuit will be.	A. Unity B. Infinity C. 0.5 D. Zero
326	Which incapability of the materials is represented by the phenomenon of hysteresis.	A. Magnetic saturation B. Low susceptibility C. Retrace the path D. Orientation
327	Why a positively charged object is made neutral by someone touching it.	A. Electrons flow from the object B. Protons flow onto the object C. Protons flow from the object D. Protons flow onto the object
328	In half wave rectifier the rms value of A.C. component of the wave is.	A. More than A.C. Value B. Less than D.C. value C. Same as that of D.C. D. Not detectable
329	Two wires P and Q each of same length and the same material are connected in parallel to a battery The diameter of P is half that of Q What fraction of the total current passes through P.	A. 0.02 B. 0.25 C. 0.33 D. 0.50
330	The effective resistance in an A.C. circuit is	A. An inductance B. An impedance C. A mutual inductance D. Always zero
331	Condenser is used	A. To produce charge B. To change the direction of current C. To collect the charge D. As a good conductor of electricity
332	Potential of earth's surface is.	A. Negative B. Positive C. Zero D. Infinite

		D. Infinite
333	A well known example of an intrinsic semi conductors is.	A. Germanium B. Phosphorus C. Cobalt D. Aluminium
334	Which of the following does not reflect the laws of static charges.	A. like charges repel B. Opposite charges attract C. Neutral charges repel D. Neutral objects are attracted to charged ones.
335	Magnetic flux with a closed circuit depends	A. Directly on number of turns of the coil B. Inversely on number of turns of the coil C. On geometry of the circuit D. Nature of the charges
336	Iron loss in a dynamo arises because of.	A. The resistance of armature coil B. The production of eddy current C. The presence of mechanical friction D. The leakage of flux
337	The cathode ray oscilloscope is used	A. For viewing the wave shape of rapidly changing electric current B. As voltmeter C. For measuring time intervals between electricalimpulses D. All of the above
338	Which of the following is not the SI unit of magnetic flux density.	A. Wb m2 B. N A-1 m-1 C. Tesla D. N mA-1
339	Which we double the voltage in a simple electric circuit, we double the	A. Current B. Power C. Resistance D. Both a and b
340	The basic circuit element is a D.C. circuit is	A. An inductor B. A resistor C. A capacitor D. A battery
341	When a following field is governed by Maxwell's equations.	A. Electrodynamics B. Optics C. electric circuits D. All of these
342	A number of spherical capacitors of different radii have same potentials The surface charge density on them	A. I equal B. Is proportional to their radii C. Is inversely proportional to their radii D. Is inversely proportional to square of their radii
343	The energy stored per unit volume inside the solenoid is called.	A. Energy density B. Mass density C. Charge density D. Volume density
344	Why should household appliances be connected in parallel with the voltage source.	A. To increase the resistance of the circuit B. To decreases the resistance of the circuit C. To provide each appliance the same voltage as the power source D. To provide each appliance the same current as the power source.
345	In electronegative waves the electric and magnetic fields are.	A. Parallel to each other B. Perpendicular to each other C. antiparallel to each other D. At an angle of 45 ^o to each other
346	The SI unit of magnetic flux is.	A. N A-1 B. N m-1 A C. N m A-1 D. N m-1 A-1
347	Which part of D.C motor reverses the direction of current through the coil every half cycle.	A. The armature B. The commutator C. the brushes D. The slips rings

348	The cause of production of eddy current is the	A. Current flowing in a conductor B. Current flowing in a insulator C. Motion of a conductor in a varying magnetic field D. Motion of an insulator in a varying magnetic field
349	According to Gauss's law the number of electric field lines crossing any closed surface is.	A. numerically equal to the enclosed charge B. Equal to the enclosed positive charge C. Equal to teh electric field inside the surface D. Equal to the charge density on the surface.
350	A voltmeter is a	A. High resistance galvanometer B. Low resistance galvanometer C. Zero resistance galvanometer D. Infinite resistance galvanometer
351	What is measured by the energy dissipated when a source drives a unit charge round a complete circuit.	A. Electromotive force B. Potential difference C. Power D. Resistance
352	Which are the following describe the study of static magnetic fields.	A. Electrodynamics B. Megnetostatic C. Electrostatic D. Paraamagnetism
353	A pair of point charges with equal magnitude and opposite sign separated by a distance 'r' produce.	A. Electric dipole B. Electric charge C. Electric field D. electric arc
354	Gauss's law a most useful in cases where the charge distributions.	A. Are made up of discrete point charges B. Are finite in their spatial extent C. Give rise to inverse square law fields D. Posses a certain amount of symmetry
355	Two charged spheres are separated by 2 mm Which of the following would produce the greatest attractive force.	A. +1 q and + 4 q B. -1 q and -4 q C. +2 q and +2 q D. +2 q and -2q
356	If work must be done by an outside agent attempting tobring two point charges close together.	A. They are of opposite signs B. The field is not conservative C. The work is recoverable when they separate D. The P.E. of the charges is reduced by the amount of the work done
357	The steady current which produces the same heating effect in a resistance in a given time as the alternating current does in the same resistance in the same time is called.	A. Induced current B. Root mean square value of an alternating current C. Mean value of alternating current D. Electromotive force
358	Conductance is the reciprocal of	A. Inductance B. Capacitance C. Resistance D. Admittance
359	Charge carriers in thermocouples are.	A. Anions B. Cations C. Electrons D. Protons
360	Why a positive charged object is made neutral by someone touching it.	A. Electrons flow from the object B. Proton flow onto the object C. Protons flow from the object D. Proton flow onto the object
361	It is sometimes necessary to protect electrical apparatus from magnetic field This can be done by surrounding the apparatus with a box made from.	A. Aluminum B. Iron C. Steel D. Rubber
362	In which process the passage of an electric current through a conductor releases heat.	A. Joule heating B. Ohmic heating C. resistive heating D. All of these
		A. Scalar

363	Magnetic moment is a	A. Scalar B. Vector C. Phasor D. Tensor
364	Which of the following quantity is defined in terms of the rate of change of electric displacement field.	A. Conventional current B. Electronic current C. Displacement current D. Pulsating current
365	The magnetic induction is also called the	A. Magnetic intensity B. Magnetic flux C. Magnetic flux density D. Magnetic magnetization
366	If the transformer turns ratio is 2 and the impedance of primary coil is 250 Ohms then the impedance secondary coil will be.	A. 125 Ohms B. 250 Ohms C. 500 Ohms D. 1000 Ohms
367	In what form is the energy stored in an inductor.	A. Magnetic B. electrostatic C. Magnetic and electrostatic D. All of the above
368	A p-type material is formed then a semiconductor is doped with	A. Trivalent impurity B. Tetravalent impurity C. All of above D. A material having excess of free electrons
369	The impedance of the circuit at resonance frequency is	A. Minimum B. Maximum C. Zero D. Infinity
370	Which electrical component may be used to store electrical energy in a time delay circuit	A. Capacitor B. Light dependent resistor C. Resistor D. Thermistor
371	What is the smalless total resistance using only a 6 ohm and 12 ohm resistors.	A. 2 Ohm B. 3 Ohm C. 4 Ohm D. 6 Ohm
372	The capacity of a spherical conductor is numerically equal to its.	A. Surface area B. Diameter C. Radius D. Volume
373	Which two terminal passive electronic component implements electrical resistance as a circuit element.	A. Capacitor B. Inductor C. Resistor D. Transformer
374	Which field is produced by electric charge on a body at rest.	A. Electric field only B. Magnetic field only C. Neither electric nor magnetic field D. Both electric and magnetic fields
375	A single silicon photovoltaic cell produces a voltage of the order of.	A. 0.3 V B. 0.6 V C. 0.9 V D. 1.2 V
376	What is the term for an motion of charge from one region to another.	A. electric charge B. Electric current C. Electric field D. Electric potential
377	An induced emf in a coil is independent of	A. Time B. Resistance C. the number of turns in a coil D. The charge in the magnetic flux
378	A expression for total work done by the battery to move charge against an induced emf is equal to.	A. W = LI2 B. W = 1/2 LI C. W = 1/2 L3I D. W = 1/2 LI2
379	The direction of induced e.m.f in a circuit is in accordance with conservation of.	A. Mass B. Charge C. Momentum D. Energy
380	At which temperature a ferromagnetic material becomes paramagnetic on healing.	A. Kelvin temperature B. Celsius temperature C. Curie temperature D. Fahrenheit temperature

		D. Fahrenheit temperature
381	An electric lamp use energy at the rate of 46 W on a 12 V supply. How much charge passes through the lamp in 2s.	A. 0.15 C B. 0.50 C C. 2.0 C D. 8.0 C
382	The material of an electromagnet should have high	A. Permeability B. susceptibility C. Retentivity D. Hysteresis loss
383	A wire of 5 m length carries a steady current if the field inside it is 0.2 v m-1 then the potential difference will be.	A. 0.1 V B. 0.5 V C. 1 V D. 5 V
384	According to Coulomb's law what happens to the attraction of two oppositely charged objects as their distance of separation increases.	A. Increase B. Decrease C. Remain unchanged D. Cannot be determined
385	Which quantity decay exponentially when a capacitors is discharged.	A. Charge only B. Charge and voltage only C. Charge and current only D. Charge voltage and current
386	What is the about the electric field inside a metallic sphere.	A. It is zero B. It varies with the shape of the conductor C. It depends on the charge there D. It does not charge the metallic sphere
387	A diode cn be used as	A. Amplifier B. Rectifier C. Oscillator D. Transistor
388	If a conductor sun infirmly stretched so that its length is increased in timed, then its resistance becomes.	A. n times the original resistance B. 1/n times the original resistance C. n2 times the original resistance D. n3 times the original resistance
389	In a n-type material there is an excess of.	A. Free electrons B. Holes C. Quarks D. Measons
390	A 100 Hz A.C. is following in A 7 mH inductance What is its reactane.	A. 0.4 Ohms B. 4.4 Ohms C. 7Ohms D. 44 Ohms
391	The net charge on a condenser is	A. Zero B. Q/2 C. 2Q D. Infinity
392	How power factor of a circuit can be improved.	A. Using capacitors B. Using cokes C. Using resistors D. All of these
393	To measure the accurate value of potential difference across two points, the voltmeter should have.	A. Zero resistance B. small resistance C. Large resistance D. Infinite resitance
394	A straight wire carrying current will experience a force when place in uniform magnetic field if	A. The current and field are parallel B. The current and field are at an angle C. the current and field are parallel in opposite directions D. All of the above
395	The magnetic flux density at the centre of a long solenoid is dependent on.	A. The number of turns per unit length of the silenced B. The volume of the solenoid C. The diameter of each turn of the solenoid D. All of above
396	The gravitational potential inside a hollow spherical shell	A. Increases from zero at the centre to the maximum value at the surface B. Is zero throughout the inteior C. Decreases from the centre D. Is uniform throughout the interior
		A. The dielectric strength of the

397	The amount of charge which can be placed on a conductor does not depend on.	A. The dielectric strength of the surrounding medium. B. Its capacitance C. Its potential D. Its size or shape
398	The sum of the positive and negative peak values is known as.	A. Peak value B. Average value C. Instantaneous value D. Peak to peak value
399	Static electricity occurs when	A. two metals are connected to a battery B. Different insulators are rubbed together C. The weather is very humid D. Different conductors are rubbed together
400	A heart coil is out into two equal parts and only one part is now used in the heater The heat generated will be.	A. Halved B. One fourth C. Doubled D. 4 times
401	In a R-L-C series circuit, when the frequency of A.C. source is high the circuit is.	A. R-L Circuit B. R-C circuit C. L-C circuit D. R-L or R-C
402	A galvanometer can be converted into voltmeter by connecting in series with the galvanometer a	A. Low resistance B. High resistance C. Resistance of intermediate range D. Shunt
403	If a capacitor is charged by using a 1.5 V battery, how much charge will capacitor gain.	A. 0 V B. 0.5 V C. 1.5 V D. 3 V
404	When two point charges of equal magnitude and opposite sign exist very close to one another the arrangement is called.	A. An electric dipole B. An amperian current C. A null charge D. A neutral source
405	A magnetic pole	A. Is made of a magnetic material B. Is a factious quantity C. Is defined in terms of Ampere's law D. Cannot be detected
406	Which of these is not a method of charging.	A. Friction or rubbing B. Induction C. Contact or touching D. Convection
407	The materials whose resistivity becomes zero below a certain temperature.	A. Semi conductors B. Super conductors C. Insulators D. conductors
408	The core of a transfer is made of iron because	A. Iron is a good electric material B. Iron is cheaper than copper C. Iron is easily magnetized and demagnetized D. Iron makes a good permanent magnet
409	Under which of the following conditions current in a circuit is wattles.	A. When inductance in the circuit is zero B. When resistance in the circuit is zero C. When current is alternating D. When resistance and inductance both are zero
410	What is emitted by the hot metal filament in a cathode ray tube.	A. Alpha particles B. Electrons C. Protons D. X rays
411	Work can be stored in an inductor as.	A. Elastic P.E. B. Electrical P;E. C. Gravitational energy D. K.E.
412	The immediate cause of alternating currrent in the secondary coil of a transformer is	A. A changing electric field B. a changing magnetic field C. The motion of primary coil D. The iron core of the trnasformer
		A. Silver

413	Which material has the larges resistivity.	B. Germinium C. Amber D. Sulphur
414	The property of an object that causes it to create a magnetic field in opposition to an externally applied magnetic field is.	A. Paramagnetism B. Diamagnetism C. Ferromagnetism D. Demagnetism
415	Positive electric charge is the type of charge found on a rod which has been rubbed with silk and which is made of.	A. rubber B. Glass C. Steel D. Cork
416	What is the part of a simply D.C. motor that reverses the direction of current through the coil every half cycle.	A. Armature B. Brushes C. Commutator D. Slip rings
417	When a charged particle is moved through a magnetic field if suffers is change in its.	A. Charge B. energy C. Mass D. direction of motion
418	As a positively charged rod is brought closer and closer to a positively charged electroscope the gold leaf.	A. diverges B. Converges C. is neutralized D. Is unaffected
419	In which device is a permanent magnet used	A. An electric bell B. An electromagnet C. A plotting compass D. A relay
420	Mutual inductance has a practical role in the performance of the	A. Radiochoke B. Transformer C. Generator D. Trnasistor
421	An electrical device is rated at 12 W , 2 A How many 1.5 V batteries are needed in the device.	A. 2 B. 4 C. 6 D. 8
422	How the fuse wire in electric supply line is connected to protect the electrical appliances.	A. In parallel B. In sereis C. In mixed order D. In vertical position
423	Pure silicon has valence electrons	A. 1 B. 2 C. 3 D. 4
424	A D.C Motor converts	A. Mechanical energy into electrical energy B. Mechanical energy into chemical energy C. Electrical energy into mechanical energy D. Electrical energy into chemical energy
425	The electric heater takes a current of 4 A from a 250 V supply . How long would it take the heater to convert 400,000 J of electric energy.	A. 100 s B. 200 s C. 400 s D. 750 s
426	A device consisting two different conductors that produce a voltage proportional to the temperature difference between either end of the pair of conductors is a.	A. Thermistor B. Thermocouple C. Strain gauge D. Potentiometer
427	Charge to mass ration of an electron is determined by using the relation.	A. e/m = B/rv B. e/m = r/vB C. e/m = V/Br D. e/m = v/r
428	Relative permeability is	A. The ratio of flux density in a material to that for a vacuum B. Very large for paramagnetic materials C. small for paramagnetic materials D. None of these
429	The cosine of the phase angle between the current and voltage in an A.C. circuit is called the	A. Lead factor B. Lag factor C. Dissipation factor

		D. Power factor
430	The circuit of full wave rectification consists of	A. Only one diode B. Two diodes C. Three diodes D. Four diodes
431	An instrument used to find the direction of the earths magnetic field is known as.	A. Magnetometer B. Electroscope C. Cyclotron D. Particle accelerator
432	The thermionic current increases when	A. Area of filament is decreased B. Area of filament is increased C. Temperature is decreased D. Work function is increased
433	Lagging of magnetic flux density behind the magnetizing fled is known as.	A. susceptibity B. Diamagnetism C. Hysteresis D. Retentivity
434	In a parallel resonant circuit, at resonance	A. Current is maximum B. Voltage is maximum C. Impedance is minimum D. Impedance is zero
435	The direction of electric field line surround the test charge -q id	A. Parallel B. Perpendicular C. Radially outward D. Radially inward
436	The magnitude of induced emf during electromagnetic induction is controlled by.	A. Magnetic flux B. electric flux C. Electric field D. Magnetic field
437	Lagging of magnetic flux density behind magnetic field is known as.	A. Permeability B. Susceptibility C. Hysteresis D. Uncertainty
438	The field inside a hollow spherical conductor is.	A. Constantin zero B. Constant but not necessarily zero C. A function of charge on sphere D. a function of distance from the centre
439	The rms value of alternating current is always	A. Infinity B. Unity C. Positive D. Negative
440	Which one is not a semiconductor.	A. Go As B. Ge C. Sc D. In
441	The phenomenon in which a charging current in one coil induces an emf in another coil is called.	A. Induced current B. Induced emf C. Self induction D. Mutual induction
442	A current carrying loop lying-in a magnetic field behaves lime a.	A. Magnetics pole B. Magnetic material C. Magnetic dipole D. Horse shoe magnet
443	In order to measure the true emf of an electrolytic cell it is necessary that.	A. The measurement be made while charging the cell B. No current be drawn from the cell C. The cell be connected into a type circuit D. The cell be connected into a parallel type circuit
444	The electric current can be defined by its	A. Chemical effect B. Magnetic effect C. Heating effect D. All of these
445	Electrostatic force as compared to gravitational force is	A. Zero B. infinite C. Very weak D. Very strong
446	The magnetic flux linked with a circuit when a unit current flows through it is known as.	A. Induced current B. Induced emf C. Coefficient of self induction of

		circuit D. Eddy current
447	The value of power factor in an LCR sense circuit at resonance is.	A. Zero B. 0.5 C. unity D. Infinity
448	Five joules of work is needed to shift 10 C of charge from one place to another The potential difference between the places is.	A. 0.5 V B. 2 V C. 5 V D. 10 V
449	The SI unit of mutual induction a	A. Vs-1 A-1 B. V m -1 A-1 C. Henry D. Tesla
450	In a purely resistive circuit carrying A.C. current the.	A. Current and voltage are always in phase B. Current lags the voltage by 1/4 cycle C. Voltage lags the current by 1/4 cycle D. Current leads the voltage by 1/2 cycle
451	If a charged body is moved against the electric field it will gain.	A. P.E B. K.E. C. Electrical P.E. D. Gravitational energy
452	A charged particles moving in a magnetic field experiences a resultant force.	A. Proportional to its K.E. B. In the direction of the field C. In the direction opposite to its motion D. In the direction perpendicular to both the field and its motion
453	Electric field lines	A. Start from a negative charge and terminal ate on a positive charge B. Never cross each other C. Always cross each other D. Leaving a positive charge are not proportional to the maginitud of charge
454	Why are charged capacitors dangerous.	A. They can leak a harmful chemicals B. They can cause loss of vision C. They can release a lethal charge D. They can release gama rays.
455	The amount of heat developed in a resistor is directly proportional to.	A. The square of the current only B. The resistance of the conductor only C. The time of current passing only D. The square of current resistance and teh time of current flow
456	It is deduced that a piece of metal is already a magnet if	A. A copper wire is attracted to it B. A copper wire is repelled by it C. One end of a compass is repelled by it D. Both ends of a compass needle are attracted to it.
457	A single silicon photovoltaic cell produces a current of the order of.	A. A few miliamperes B. 10² A C. 10³ A D. 10⁴ A
458	When 5 C of charge flows through a particular resistor 10 J of energy is converted What is the p.d. across the resistor.	A. 0.5 V B. 2.0 V C. 15 V D. 50 V
459	The picture to be transmitted must be scanned because in T.V transmission light wave are first changing into.	A. sound wave B. Electric fluctuations C. Magnetic fluctuations D. Signals
460	Which material has the highest magnetic susceptibility.	A. Steel B. Brass C. Iron D. Wood
461	If we use two diodes and a centre tapped transformer we will get.	A. A transistor B. An amplifier C. A half wave rectifier

		D. A full wave rectifier
462	When a point charge which is responsible for a force being exerted on another point charge is suddenly moved the second charge experience.	A. Nor charge of force B. An instantaneous change of force C. A sudden change of force of some later time D. an increase of its charge because of induction.
463	The energy supplied in charging a capacitor resides after the charging in.	A. The magnetic field B. The electric field C. the battery D. The moving conduction charges
464	A device used to detect and measure charge is.	A. A voltmeter B. An ammeter C. An electroscope D. An amplifier
465	The output of a generator which uses a split ring commutator is.	A. sinusoidal A.C. wave B. Pulsating D.C. wave C. Constant D.C Voltage D. Linerly increasing voltage.
466	An A.C. dynamo operates on the principle of	A. Mutual induction B. Self induction C. Electromagnetic induction D. Mechanical induction
467	Which physical law expresses the relationship between the heat generated and the current through a conductor.	A. Ohm's law B. Kirchoff's law C. Joule's law D. Ampere's law
468	An electric motor could be used as a	A. Battery B. Capacitor C. Dynamic D. Transofrmer
469	When Electric current flows through the wire it increases.	A. P.E of the atoms B. K.E. of the atomss C. Atomic size D. Number of protons
470	For D.C. circuit the resistance can be taken as impedance with zero.	A. Volt B. Ampere C. Phase angle D. Watts
471	In the concept of magnetic circuit, the quantity analogous to resistance in Ohm's law is.	A. Reactance B. Dipole C. Impedence D. Reluctance
472	Amorphous solids are also called	A. Crystalline solids B. Glassy solide C. super conductors D. Polymeric solids
473	Eddy current can be minimized by	A. Moving the conductor rapidly B. Moving the conductor slowly C. Using a metallic core D. Using a laminated core
474	By placing soft iron inside a coil	A. Increases the magnetic flux B. Decreases the magnetic flux C. Creates no change in magnetic flux D. Decreases the diameter of the core
475	Which magnetic properties is inherent in all materials.	A. Para magnetism B. diamagnetism C. Ferromagnetism D. demagnetism
476	The circuit in which current and voltage are in phase the power factor is.	A. Zero B. Unity C. Double D. 4 times
477	The magnetic force is simply a	A. Reflecting force B. Deflecting force C. Restoring force D. Gravitational force
478	The ratio of the magnitude of charge on one of the two conductors in proximity to the potential difference between the two is called	A. Inductance B. Reactance C. Resistance

	potential difference between the two is called.	C. Resistance D. Capacitance
479	The permittivity of a medium.	A. Is a measure of the density B. Is equal to unity for air C. Depends on the charge derisory of the medium D. Determines the magnitude of an electric field that can be established by the medium
480	The conductivity of a conductor is independent of the	A. Electric charge B. Electric potential C. Electric field D. Internal resistance
481	Susceptance of a circuit is the reciprocal of.	A. Admittance B. Resistance C. Reactance D. Impedance
482	The basic quantity used to describe the state of magnetization of a substance is the	A. Magnetic strength B. Magnetic susceptibility C. Magnetic moment D. Magnetic moment per unit volume
483	If air is replaced by any other dielectric medium, the force between two charges.	A. Decreases B. Increases C. Remain the same D. Becomes infinity
484	An other name for electric P.E per unit charge is.	A. Electric intensity B. Electric field C. Electric potential D. Electric force
485	The direction of force on a moving negative charge will be.	A. Opposite to that of positive charge B. Similar to that of positive charge C. At right angel to the positive charge D. Parallel to the positive charge
486	Which material has the greatest di electric constant.	A. Mylar B. Glass C. Germanium D. Water
487	What for is semiconductor diode used.	A. To convert D.C. to A.C. B. To convert A.C. to D.C. C. To increase voltage D. To decrease voltage
488	A type of resistor whose resistance varies significantly with temperature is.	A. Thermistor B. Thermocouple C. Strain gauge D. Potentiometer
489	The advantage of LEDs over filament lamp is their	A. Small size B. Reliability C. High operating speed D. All of the above
490	One volt is equal to.	A. One joule per coulomb B. One dyne per coulomb C. One newton per coulomb D. One watt second
491	A dry battery can deliver 3,000 J energy to a small 2 W electric motor before the battery is exhausted for how minutes does the motor run.	A. 20 minutes B. 25 minutes C. 75 minutes D. 125 minutes
492	In electric magnetism , the additional fundamental quantity that is chosen as a basic unit is called.	A. Electric potential B. Electric fierce C. Electric charge D. Magnetic force
493	On which factor mutual induction of two coils does not depends upon.	A. Number of turns of the coils B. Area of cross section of the coils C. Closeness of the coils D. Shape of the coils
494	When light emitting diode is forward biased, it emits light of the colour	A. Red B. Yellow C. Green D. All of these
495	The resistance of 10 micro F capacitance, when connected to A D.C. circuit is.	A. Zero B. Unity C. -1

		D. Infinity
496	Which statement is true about the Magnetic poles.	A. Unlike poles repel B. Like poles attract C. Magnetic poles do not effect each other D. A single magnetic pole does not exist
497	The induced current in a circuit can be increased by	A. Using a strong magnetic field B. Moving the loop faster C. Replacing the loop by a coil of many turns D. All of the above
498	If the number of coulombs per second through a wire of 10 Ohm resistance across a 120 V line is 12, the current is	A. 5 A B. 10 A C. 12 A D. 15 A
499	What happens when a 250 V, 2500 W water heater is connected to main supply using a plug fitted with a 5 A fuse.	A. The fuse in the plug melts B. The heartier burns out C. The hearter runs at half power D. The hearter works normally
500	Capacitance is define das	A. VC B. Q/V C. QV D. V/Q
501	Equipotential surfaces in an electric field are always.	A. Spherical B. Closed surfaces C. Tangent to electric lines of force D. Perpendicular to electric lines of force
502	At room temperature the p.d. between the two sides of depletion region for germanium is of the order of.	A. 0.3 V B. 0.5 V C. 0.7 V D. 0.9 V
503	A device used to measure the strain of an object and it is a type of resistor that changes value with applied strain is a	A. thermistor B. Strain gauge C. Thermocouple D. Potentiometer
504	What is the range of values of power factor.	A. 0 to -1 B. 0 to +1 C. 0 to 2 D. 2 to 3
505	With increase in temperature the electrical conductivity of intrinsic conductors.	A. Increases B. Descreases C. Remain unaffected D. First increases then decreases
506	What is the direction of the magnetic field lines inside a bar magnet.	A. From north pole to south pole B. From south pole to north pole C. From side to side D. There are no magnetic field lines
507	A capacitor of capacitance F micro is fully charged from a 20 V d.c supply what is the energy delivered by 20 V supply.	A. 2 mJ B. 10 m j C. 20 mJ D. 25 mj
508	Which onw of the following is deflected by an electric field.	A. Alpha particles B. Gama rays C. Neutrons D. x rays
509	Which one of the following materials has negative temperature coefficient.	A. Conductors B. Semiconductors C. Insulators D. Covalent bonds
510	The internal resistance of a primary cell depends upon the.	A. Current dawn form the cell B. Concentration of the solution C. distance between cell electrodes D. All of the above
511	When a dielectric material is placed in an electric field it	A. Conducts B. Exhibits an electrical discharge C. Become polarized D. Undergoes electrolysis
512	The vertical component of earth's magnetics field is zero	A. At magnetic poles B. At geographical poles

512	The vertical component of earth's magnetics field is zero.	C. At magnetic equator D. Everywhere
513	Which of the following is an example of induced magnetism.	A. A compass needle pointing north B. A north pole attracting iron filings C. A northpole repelling a north pole D. The coil of a motor turning in a magnetic field.
514	What information is given by the tangent to a field that point of electric field.	A. Magnitude B. Direction C. Proper unit D. Dimensions
515	The main causes of power losses in a generator are.	A. Pulsatng current B. Eddy current C. Magnetic current D. Both B and C
516	A generator running in reverse may be called as.	A. A.C. Generator B. D.C. generator C. Motor D. Commutator
517	Which given material is the best for making connecting wires	A. Nichrome B. Iron C. Gold D. Copper
518	The force exerted by two charged bodies on another obeys Coulomb's law provided that	A. Both bodies are in the same medium B. the charges are not too great C. On body does not lie inside the other D. The linear dimensions of the body are very much less than the distance between the bodies.
519	In the magnetic circuit concept the quantity analogous to electric current in electric circuit analysis is.	A. Magnetic flux density B. Permeability C. Magnetic field intensity D. Magnetic flux
520	The work done is moving a very small charge in an electric field from one point to another is	A. Independent of the path B. Equal to the potential difference between the two points. C. Measured in V m-1 D. Measured in J c-1
521	If the transformer turns ratio is 2 and the impedance eof primary coil is 250 Ohms then the impedance secondary coil will be.	A. 125 Ohms B. 250 Ohms C. 500 Ohms D. 1000 Ohms
522	They hysteresis losses are eliminated in power transformer by using	A. Low resistivity power winding B. Low reflectance steel cores C. Laminated steel cores D. soft iron cores
523	The most common trivalent impurities are	A. Boron , indium B. Arsenic, indium C. Arsenic, Antimony D. Aluminium, Boron
524	The process of combining low frequency signals with high frequency radio waves is called.	A. Modulation B. Resonance C. Fluctuation D. Amplitude
525	Why should the metal casing of an electrical fire be earthen.	A. To complete an electrical circuit. B. To prevent the fire from overheating C. To reduce the risk of electric shocks D. To stope the casing from getting too not to touch
526	A capacitor is connected to a battery The fore of attraction between the plate when the separation between them is halved will	A. Remain the same B. Become twice C. Become 4 times D. Become 8 times
527	Which one of the following is not a measure of electric power.	A. Vi B. I2R C. VR2 D. V2/R
528	Capacitance and applied	A. Electric potential B. Current density

528	Current per unit area is called.	C. Charge density D. Electric intensity
529	When a wire moves perpendicularly to a magnetic field, the induced emf does ot depends upon	A. The velocity of the wire B. The resistance of the wire C. The flux density of the magnetic D. The orientation of the wire field
530	Which method of charging is involved in making lightning.	A. Induction B. Friction C. Contact D. Convection