

SQL result

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SQL query: SELECT * FROM `questions` LIMIT 0, 180 ;

Rows: 177

id	question	choice1	choice2	choice3	answer
1	One of the following objectives is not achieved by the process of annealing	to soften the metal	to relieve internal stress	to refine grain structure	to increase the yield point
2	The melting point of the filler material in brazing should be above(in degree celcius)	800	1000	600	420
3	The mechanical advantage of a lifting machine is the ratio of	distance moved by effort to the distance moved by load	output to the input	all of the above	load lifted to the effort applied
4	One of the following function is not performed by coating on the welding electrodes	provide protective atmosphere	refuce oxidation	stabilize the arc	increase the cooling rate
5	The friction experienced by a body, when in motion, is known as	limiting friction	rolling friction	static friction	dynamic friction
6	In a process chart the inverted triangle symbol indicates	inspection	an operation	transport	storage
7	If the resultant of two equal forces has the same magnitude as either of the forces, then the angle between the two forces is	60	30	90	120
8	In oxacetylene welding, acetylene is produced using	Ca (OH)2 and CO2	CH4 and H2SO4	CaCO3 and H2O	Ca C2 and H2O
9	The range of projectile on a downward inclined plane is _____ the range on upward inclined plane for the same velocity of projection and angle	less than	equal to	none of these	more than
10	The force required to move the body up the plane will be minimum if it makes an angle _____ with the inclined plane _____ the angle of friction.	greater than	less than	none of these	equal to
11	The range of a projectile is maximum, when the angle of projection is	90	30	60	45
12	Two balls of equal mass and of perfectly elastic material are lying on the floor. One of the ball with velocity v is made to struck the second ball	v	v/8	v/4	v/2
13	Static friction is always _____ dynamic friction	equal to	less than	none of these	greater than

id	question	choice1	choice2	choice3	answer
14	Two like parallel forces are acting at a distance of 24 mm apart and their resultant is 20 N. If the line of action of the resultant is 6 mm from any given force, the two forces are	20 N and 5 N	15 N and 15 N	none of these	15 N and 5 N
15	A body will begin to move down an inclined plane if the angle of inclination of the plane is _____ the angle of friction.	less than	none of these	equal to	greater than
16	One watt is equal to	0.1 joule/s	100 joules/s	10 joules/s	1 joule/s
17	The maximum frictional force, which comes into play, when a body just begins to slide over the surface of the other body, is known as	dynamic friction	static friction	coefficient of friction	limiting friction
18	When a rigid body is suspended vertically, and it oscillates with a small amplitude under the action of the force of gravity, the body is known as	second's pendulum	torsional pendulum	simple pendulum	compound pendulum
19	The algebraic sum of the resolved parts of a number of forces in a given direction is equal to the resolved part of their resultant in the same direction. This is known as	principle of independence of forces	principle of transmissibility of forces	none of these	principle of resolution of forces
20	The law of motion involved in the recoil of gun is	none of these	Newton's second law of motion	Newton's first law of motion	Newton's third law of motion
21	The force, by which the body is attracted, towards the centre of the earth, is called	impulsive force	momentum	mass	weight
22	Three forces acting on a rigid body are represented in magnitude, direction and line of action by the three sides of a triangle taken in order. The forces are equivalent to a couple whose moment is equal to	area of the triangle	area of the triangle	half the area of the triangle	twice the area of the triangle
23	If the number of pulleys in a system is equal to its velocity ratio, then it is a _____ system of pulleys	third	first	fourth	second
24	Coplaner concurrent forces are those forces which	do not meet at one point and their lines of action do not lie on the same plane	meet at one point, but their lines of action do not lie on the same plane	do not meet at one point, but their lines of action lie on the same plane	meet at one point and their lines of action also lie on the same plane
25	The angle of inclination of the plane at which the body begins to move down the plane, is called	angle of repose	none of these	angle of projection	angle of friction
26	The centre of gravity of a quadrant of a circle lies along its central radius (r) at a distance of	0.5r	0.8r	0.7r	0.6r

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27	A lead ball with a certain velocity is made to strike a wall, it falls down, but rubber ball of same mass and with same velocity strikes the same wall, it rebounds. Select the correct reason from the following:	both the balls undergo an equal change in momentum	none of the above	the change in momentum suffered by rubber ball is less than the lead ball	the change in momentum suffered by rubber ball is more than the lead ball
28	In a single threaded worm and worm wheel, the number of teeth on the worm is 50. The diameter of the effort wheel is 100 mm and that of load drum is 50 mm. The velocity ratio is	50	150	200	100
29	When a body falls freely under gravitational force, it possesses _____ weight.	maximum	less	minimum	no
30	Which of the following statement is correct?	The velocity of the particle moving with simple harmonic motion is zero at the mean position	The periodic time of a particle moving with simple harmonic motion is directly proportional to its angular velocity	The acceleration of the particle moving with simple harmonic motion is maximum at the mean position.	The periodic time of a particle moving with simple harmonic motion is the time taken by a particle for one complete oscillation,
31	According to lamis theorem	the three forces must be at 120degree to each other	the three forces must be equal	the three forces must be in equilibrium	if the three forces acting at a point are in equilibrium, then each force is proportional to the sine of the angle between the other two
32	Moment of inertia of a triangular section of base (b) and height (h) about an axis passing through its vertex and parallel to the base, is _____ than that passing through its C.G. and parallel to the base.	nine times	ten times	seven times	six times
33	A machine having an efficiency greater than 50%, is known as	non-reversible machine	ideal machine	neither reversible nor non-reversible machine	reversible machine
34	A cycle consisting of one constant pressure, one constant volume and two isentropic processes is known as	Carnot cycle	Stirling cycle	Otto cycle	Diesel cycle
35	The efficiency and work ratio of a simple gas turbine cycle are	low	High	very high	very low
36	The compression ratio for petrol engines is	3 to 6	15 to 20	20 to 30	5 to 8
37	The distillation carried out in such a way that the liquid with the lowest boiling point is first evaporated and recondensed, then the liquid with the next higher boiling point is then evaporated and recondensed, and so on until all the available liquid fuels are separately recovered in the sequence of their boiling points. Such a process is called	cracking	carbonisation	full distillation	fractional distillation
38	One kg of carbon monoxide requires _____ kg of oxygen to produce 11/7 kg of carbon dioxide gas	All	11/4	9/7	4/7

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39	A vertical column has two moments of inertia (i.e. I_{xx} and I_{yy}). The column will tend to buckle in the direction of the	axis of load	perpendicular to the axis of load	maximum moment of inertia	minimum moment of inertia
40	Euler's formula holds good only for	short columns	both short and long columns	weak columns	long columns
41	When a rectangular beam is loaded transversely, the maximum compressive stress is developed on the	top layer	neutral axis	every cross-section	bottom layer
42	The point of contraflexure is a point where	shear force changes sign	shear force is maximum	bending moment is maximum	bending moment changes sign
43	The energy stored in a body when strained within elastic limit is known as	resilience	proof resilience	impact energy	strain energy
44	Resilience is the	energy stored in a body when strained within elastic limits	energy stored in a body when strained upto the breaking of the specimen	maximum strain energy which can be stored in a body	none of the above
45	In a simple bending of beams, the stress in the beam varies	parabolically	hyperbolically	elliptically	linearly
46	In free convection heat transfer transition from laminar to turbulent flow is governed by the critical value of the	Reynold's number	Grashoff's number	Reynold's number, Grashoff's number	Prandtl number, Grashoff's number
47	In a refrigerating machine, heat rejected is _____ heat absorbed.	equal to	less than	none of the above	greater than
48	This stage is called:	Common Base	Common Collector	Emitter Follower	Common Emitter
49	A resistor with colour bands: red-red-red-gold, has the value:	22k and 5%	220R and 5%	22R and 5%	2k2 and 5%
50	The resistor identified in brown is called the:	Base Bias Resistor	Emitter Feedback Resistor	Bypass Resistor	Load Resistor
51	Name the three leads of a common transistor	Collector Bias Omitter	Base Collector Case	Emitter Collector Bias	Collector Base Emitter
52	What is the approximate characteristic voltage that develops across a red LED	3.4v	0.6v	5v	1.7v
53	Which is not a "common" value of resistance	2k7	1M8	330R	4k4
54	Two 3V batteries are connected as shown. The output voltage is:	3v	1.5v	6v	0v
55	The closest value for this combination is:	4k7	9k4	0	2k3
56	The four symbols are:	Electrolytic, Microphone, Resistor, Capacitor	Capacitor, Piezo, Resistor, Electrolytic	Electrolytic, Coil, Resistor, Capacitor	Capacitor, Microphone, Potentiometer, Electrolytic
57	A resistor and capacitor in series is called a:	Pulse Circuit	Oscillator Circuit/Frequency Circuit	Schmitt Circuit	Timing Circuit/Delay Circuit
58	A red-red-red-gold resistor in series with an orange-orange-orange-gold resistor produces	5k5	55k	None of the above	35,200 ohms
59	A capacitor and coil in parallel is called:	A Timing Circuit	A Delay Circuit	A Schmitt Circuit	A Tuned Circuit
60	Identify the correctly connected LED:	A	C	D	B
61	The tolerance bands: gold; silver; brown, represent:	10%, 5%, 1%	5%, 10%, 2%	10%, 5%, 2%	5%, 10%, 1%
62	The purpose of the capacitor	To pass AC on the input to the base	Block DC from the input line	To allow the stage to operate	To allow the transistor to self-bias

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63	The output of a gas turbine is 300 KW and its efficiency is 20 percent, the heat supplied is	6000 KW	150 KW	600 KW	15 KW
64	Reducing flame is obtained in oxyacetylene welding with	excess oxygen	equal parts of both gases	reduced acetylene	excess of acetylene
65	The pump with a low initial cost and low maintenance cost is	double acting piston pump	gear pump	bucket pump	centrifugal pump
66	A refrigerant used in the domestic refrigerator is	methane	air	Sulphur dioxide	freon
67	Mandrels are used to hold	face plate	cutting tools	drill bits	hollow work pieces
68	An aircraft gas turbine operates on	Sterling cycle	Rankine cycle	Otto cycle	Bryton cycle
69	Draft on a pattern is provided for	facilitating withdrawal of the pattern from the mould	easy lifting of the casting	facilitating pattern making	providing for shrinkage of the casting
70	One of the following methods is adopted for governing of steam turbines in a power plant	speed control	blow off in boiler	hit and miss governing	throttle governing
71	Sprue is the passage provided for the	outflow	smooth flow	solidification of the molten material	inflow
72	The operation of enlarging of a hole is called	drilling	reaming	counter sinking	boring
73	Quick return motion is used in a	drilling	grinder	lathe	shaper
74	For the purpose of comparison, the steam generating capacity of a boiler is generally expressed in terms of	kg/hr	steam pressure	thermal efficiency	equivalent evaporation
75	Which of the following operations cannot be performed on a lathe	thread cutting	drilling	facing	slotting
76	Feed in a lathe is expressed in	mm	mm per degree	rpm	mm per revolution
77	Rapping allowance is provided on a pattern to take care of	distortion	machining	shrinkage	easy withdrawal
78	Brasses and bronzes are welded using	reducing flame	carburising flame	oxidizing flames	neutral flame
79	Which of the following is not used as a refrigerant ?	carbon dioxide	amonia	sulphur dioxide	carbon monoxide
80	In Industry of the developed nations the type of production most often occurring is	Create lot production	Single lot production	Mass production	Batch production
81	what are wobble shimmy vibrations?	steering vibrations	vibrations caused due to imbalanced or worn parts	none of the above	Both a & b
82	what is the difference between pressure and stress?	internal & external	both external	both internal	external & internal
83	Vbe < 0.7 and a 12V power supply is connected to the circuit. Find Vo. (See the figure)	6V	27V	-18V	12V
84	Ratio of lateral strain to linear strain is called	Bulk's Modulus	Young's Modulus	Modulus of rigidity	Poisson's Ratio
85	Excess-3 conversion of binary 6 is	1000	1010	1011	1001
86	Which of the following will have more strength if material, weight and length are same?	Solid shaft	Both will be equal	Can't determine	Hollow shaft

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87	if a material has no uniform density throughout the body, then the position of centroid and center of mass are	identical	independent upon the density	unpredictable	not identical
88	The gray code of the binary code 110	001	111	110	101
89	Compression ratio of 4 stroke petrol engine is	7:2 to 9:20	9:4 to 10:15	15:1 to 22:1	7:1 to 9:1
90	Babcock & wilcox boiler is which type ?	fire tube boiler	liquid fueled	Natural circulation boiler	water tube boiler
91	When the diode is in forward bias, it is equivalent to	An OFF switch	A high resistor	A very low resistance	An ON switch
92	Solve $AB + A'C' + AB'C(AB+C)$	0	A	$AB'C(AC+B)$	1
93	A basic S-R flip-flop can be constructed by cross-coupling which basic logic gates ?	XOR or XNOR GATES	AND or NOR GATES	AND or OR GATES	NOR or NAND GATES
94	A colour code of orange, orange, orange is for what ohmic value ?	3300 ohms	44000 ohms	22 kilo ohms	33 kilo ohms
95	Work done in a free expansion process is	Maximum	Minimum	Positive	Zero
96	In ideal machines, mechanical advantage is _____ velocity ratio.	None of these	Less than	Greater than	Equal to
97	The center frequency of a band pass filter is always equal to	-3 dB frequency	Bandwidth	Bandwidth divided by Q	Geometrical average of the critical frequencies.
98	At a given instant ship A is travelling at 6km/hr due east and ship B is travelling at 8km/hr due north. The velocity of B relative to A is	7km/hr	14 km/hr	1 km/hr	10 km/hr
99	In an amplifier with negative feedback	Only the gain of the amplifier is affected	Only the gain and the bandwidth of the amplifier is affected	Only the input and output impedances are affected	All the four parameters mentioned above are affected.
100	The co-efficient of friction depends upon	Area of contact	Shape of the surface	All of the above	Nature of surfaces
id	question	choice1	choice2	choice3	answer
101	The ideal op-amp has the following characteristics	$R_i=0, A=\infty, R_o=0$	$R_i=\infty, A=\infty, R_o=\infty$	$R_i=0, A=\infty, R_o=\infty$	$R_i=\infty, A=\infty, R_o=0$
102	The units of moment of inertia of an area are	Kg-m^2	m^4	kg/m^2	kg/m^2
103	The field at any point on the axis of a current carrying coil will be	parallel to axis	perpendicular to the axis.	zero.	at angle of 45degrees with the axis.
104	Which field is associated with the capacitor?	Magnetic	Both of (A) and (B)	None of above.	Electric.
105	A DC generator without commutator is a	DC motor	DC generator	induction motor	AC generator
106	How many bits are required to store one BCD digit ?	1	2	3	4
107	The effective inhibitor of pre-ignition is	alcohol	none of these	lead	water
108	Function of transducer is to convert	Electrical signal into non electrical quantity	Electrical signal into mechanical quantity	All of these	Non electrical quantity into electrical signal
109	An OR gate has 6 inputs ,the number of input combinations in its truth table	6	32	128	64
110	Digital signals deal in the realm of the _____ possibilities	continous	infinite	discontinuous	finite
111	Digital circuits operate using _____ signals	both continous and discontinuos	continous	none	discontinuous

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112	Cellphone chargers are -	DC to AC converters	none of the above	both	AC to DC converters
113	Difference between a generator and a motor is that	both convert electrical to mechanical	latter one does not work on electromangnetic induction	none of the abaoe	latter converts electrical energy to mechanical and former converts mechanical to electrical
114	Measured Voltage $V = 20 + 0.02\text{ohm}$.Find the relative error?	3%	6.90%	0.01%	0.1%
115	metrology is the science of-	environmental changes	weather conditions	none of the above	measurement
116	Consider a string of Christmas lights . box 1 contains expensive pack of led lights connected in series ; box 2 contains cheap pack of led lights connected in parallel- Which is better	box 1	both 1 and 2	none	box 2
117	Consider two different metals joined together forming a closed cloop having two different temperature junctions , what will the effect	Current does not flow	None	Can not be determined	Current flows
121	Siemens or Mho is the unit of	Conductance	Admittance	None of the above	Both
122	If you have two different bulbs in series (e.g. a round bulb and a long bulb). Round bulb has a resistance of 25.678 ohm and long bulb has resistance of 27 ohm . which bulb will glow brighter?	both will glow equally	round bulb	none	long bulb
123	In a lifting machine, a load of 240 N is being raised and the velocity ratio is 20. If the efficiency of the machine is 40%, the effort is equal to	35	25	20	30
124	The common collector amplifier is also known as	Collector follower	Base follower	Source follower	Emitter follower
125	A Constant load power means a uniform conversion of	Mechanical energy to electrical energy	current to voltage	voltage to current	electrical energy to mechanical energy
126	The basic logic gate whose output is the complement of the input is the	OR gate	AND gate	comparator	NOT gate
127	(XOR)logic gates can be constructed from what other logic gates	OR gates only	AND gates and NOT gates	OR gates and NOT gates	AND gates,OR gates,and NOT gates
128	When transistors are used in digital circuits they usually operate in the	active region	breakdown region	linear region	saturation and cutoff regions
129	If the voltage across a fixed value of resistance is increased five times, what does the current do	It decreases by a factor of five	It stays the same	Not enough information	It increases by a factor of five
130	Shunting the ac component away from the load is the task of a	transformer	regulator	rectifier	filter
131	Increasing the number of turns of wire on the secondary of a transformer will	increase the secondary current	have no effect on the secondary current	increase the primary current	decrease the secondary current
132	Mutual induction is dependent on	winding ratios	output polarities	dc voltage levels	change in current
133	The voltage across any branch of a parallel circuit	varies as the total current varies	is inversely proportional to total circuit resistance	is dropped in proportion to each branch resistance	is equally applied to all branch conductances

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134	As compared to uniaxial tension or compression, the strain energy stored in bending is only	1/4	1/2	1/5	1/3
135	The heat and mechanical energies are mutually convertible. This statement was established by	none of these	Boyle	Charles	Joule
136	The efficiency of Carnot cycle depends upon	volume compression ratio	pressure ratio	cut-off ratio and compression ratio	temperature limits
137	An open cycle gas turbine works on	Otto cycle	Stirling cycle	Carnot cycle	Joules cycle
138	Which of the following is an intensive property of a thermodynamic system	Mass	Energy	Volume	Temperature
139	The natural solid fuel is	anthracite coal	coke	pulverised coal	wood
140	The simply supported beam A of length l carries a central point load W. Another beam B is loaded with a uniformly distributed load such that the total load on the beam is W. The ratio of maximum deflections between beams A and B is	4/5	5/4	5/8	8/5
141	In a four stroke cycle petrol engine, the charge is ignited at	30degrees before bottom dead centre	30degrees after top dead centre	30degrees after bottom dead centre	30degrees before top dead centre
142	The reference fuels for knock rating of spark ignition engines would include	normal octane and aniline	isooctane and normal hexane	isooctane and alphamethyl naphthalene	normal heptane and isooctane
143	Reactors for propulsion applications are designed for	natura uranium	plutonium	any form of uranium	enriched uranium
144	A moderator generally used in nuclear power plants is	concrete	heavy water	graphite	graphite and concrete
145	Internal gears can be made by	hobbing	shaping with rack cutter	milling	milling
146	The silicon carbide abrasive is chiefly used for grinding	cemented carbide	ceramic	cast iron	all of these
147	Drilling is an example of	orthogonal cutting	simple cutting	uniform cutting	oblique cutting
148	When the cutting edge of the tool is dull, then during machining	continuous chips are formed	discontinuous chips are formed	no chips are formed	continuous chips with built-up edge are formed
149	Cast iron during machining produces	continuous chips	continuous chips with built-up-edge	none of these	discontinuous chips
150	The work or surface speed for cylindrical grinding varies from	5 to 10 m/min	10 to 20 m/min	40 to 60 m/min	20 to 30 m/min
151	The cutting tool in a milling machine is mounted on	spindle	column	knee	arbor
152	Twist drills are made of	high speed steel	carbon steel	stainless steel	either high speed steel or carbon steel
153	The lip angle of a single point tool is usually	20degrees to 40degrees	40degrees to 60degrees	none of these	60degrees to 80degrees
154	The facing is an operation of	beveling the extreme end of a workpiece	embossing a diamond shaped pattern on the surface of a workpiece	reducing the diameter of a workpiece over a very narrow surface	machining the ends of a workpiece to produce a flat surface square with the axis
155	The lead screw of a lathe has _____ threads	double start	multi start	none of these	single start
156	A left hand tool on a lathe cuts most efficiently when it travels	from right to left end of the lathe bed	with the help of a compound slide	across the bed	from left to right end of the lathe bed

id	question	choice1	choice2	choice3	answer
157	The correct sequence of tool materials in increasing order of their ability to retain their hot hardness is	carbide,ceramic,cermet,borazon	ceramic,carbide,borazon,cermet	borazon,ceramic,carbide,cermet	cermet,carbide,ceramic,borazon
158	When the speed at which a conductor is moved through a magnetic field is increased, the induced voltage	decreases	remains constant	reaches zero	increases
159	The induced voltage across a coil with 250 turns that is located in a magnetic field that is changing at a rate of 8 Wb/s is	1000 V	31.25 V	3125 V	2000 V
160	For a given wirewound core, an increase in current through the coil	reverses the flux lines	increases the flux density	causes no change in flux density	decreases the flux density
161	When the current through the coil of an electromagnet reverses,the	direction of the magnetic field remains unchanged	magnetic field expands	magnetic field collapses	direction of the magnetic field reverses
162	What is the reluctance of a material that has a length of 0.07 m, a crosssectional area of 0.014 m ² , and a permeability of 4,500 Wb/At*m	111 At/Wb	11 At/Wb	1 At/Wb	1111 At/Wb
163	The unit for reluctance is	tesla	At/m	Wb	At/Wb
164	There is 900 mA of current through a wire with 40 turns. What is the reluctance of the circuit if the flux is 400 Wb	14,400 At/Wb	1,440 At/Wb	9,000 At/Wb	90,000 At/Wb
165	A basic one-loop dc generator is rotated at 90 rev/s. How many times each second does the dc output voltage peak (reach maximum)	90	270	360	180
166	The voltage induced across a certain coil is 200 mV. A 120 ohm resistor is connected to the coil terminals. The induced current is	16 mA	12 mA	120 mA	1.7 mA
167	The induced voltage across a stationary conductor in a stationary magnetic field is	reversed in polarity	increased	decreased	zero
168	When a solenoid is activated, the force that moves the plunger is	a permanent magnetic field	varying voltage	a steady current	an electromagnetic field
169	What is the magnetomotive force (mmf) of a wire with 8 turns carrying three amperes of current	2,400 At	240 At	2.4 At	24 At
170	In a three phase system,the voltages are separated by	45deg	90deg	180deg	120deg
171	In a Delta-connected source driving a Delta-connected load,the	load voltage and line voltage are one-third the source voltage for a given phase	load voltage and line voltage are two-thirds the source voltage for a given phase	load voltage and line voltage cancel for a given phase	load voltage, line voltage,and source phase voltage are all equal for a given phase
172	In a Delta-connected source feeding a Y-connected load	each phase voltage equals the corresponding load voltage	each phase voltage is one-third the corresponding load voltage	each phase voltage is 60deg out of phase with the corresponding load voltage	each phase voltage equals the difference of the corresponding load voltages
173	A constant load power means a uniform conversion of	mechanical to electrical energy	current to voltage	voltage to current	electrical to mechanical energy

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174	A two-phase generator is connected to two 90 ohm load resistors. Each coil generates 120 V ac. A common neutral line exists. How much current flows through the common neutral line	1.33 A	1.88 A	2.66 A	1.77 A
175	What are the two main applications for ac	direct,pulsating	electric,magnetic	static,dynamic	power,information
176	The distance that a signals energy can travel in the time it takes for one cycle to occur is called the signals	amplitude	frequency	period	wavelength
177	If current varies periodically from zero to a maximum, back to zero, and then repeats, the signal is	direct	alternating	repetitive	pulsating
178	What voltage will an ac voltmeter display	average	peak	peak to peak	rms
179	Which percentages of full-amplitude rise time are used for a pulse wave	0 to 50 percent	0 to 100 percent	5 to 95 percent	10 to 90 percent
180	What does the CRT oscilloscope display	current and frequency	rms voltage and current	frequency and voltage	voltage and period