S.No	Questions with multiple choice	Answer
	How many types of faults occur in a system?	
1	A)2	
	B)3	
	C)5	В
	D)Many	D
	System-short circuits may occur due to	
	A) Line to line contacts	
2	B) Line to neutral contacts if neutral is not earthed	
	C) Line to neutral contacts if neutral is earthed	
	D) LL and LG faults	D
	Overload relays are of type.	
	A)Induction	
3	B)Solid state	
	C)Thermal	
	D)Electromagnetic	E
	E)All above	
	The relay operating speed depends upon	
	A) The spring tension	
4	B) The rate of flux built up	
	C) Armature core air gap	D
	D) All of the above	D
	In order that current should flow without causing	
	excessive heating or voltage drop, the relay contacts	
5	should	
	A) Have low contact resistance	
	B) Be clean and smooth	
	C) Be of sufficient size and proper shape	_
	D) Have all above properties	D
	Burden of a protective relay is the power	
	A) Required to operate the circuit breaker	
6	B) Absorbed by the circuit of	
O	relay C)Developed by the relay	
	circuit	В
	D) None of these	
	Protective relays are devices that detect abnormal	
	conditions in	
7	electrical circuits by measuring	
,	A) Current during abnormal condition	
	B) Voltage during abnormal condition	
	C) Constantly the electrical quantities which	
	differ during normal and abnormal conditions	
	D) None of the above	С
	Resistance grounding is used for voltage between	<u> </u>
	A) 33kVto66kV	
8	B) HkVto33kV	
U	C) 3.3kVandllkV	
	D) None of the above	С
	D) None of the doore	Č
	Ungrounded neutral transmission system is not	

		T
	recommended because of	
9	system	
	A) Insulation being overstressed due to	
	over voltages	
	B) Insulation overstress may lead to	
	failure and subsequent phase to phase faults	
	C) Being inadequately protected against	_
	ground fault	D
	D) All of the above	
	Discrimination between main and back up protection is	
10		
10	provided by the	
	use of relays which are	
	A) Fast	
	B) Sensitive	
	C) Slow	C
	D) None of the above	
	Induction cup relay is operated due to changes in	
11	A) Current	
11		
	B) Voltage	
	C) Impedance	
	D) All of the above	D
	What is switchgear?	
	A) An apparatus used for switching,	
12	, 11	
12	controlling and protecting the electrical circuits	
	and equipments.	
	B) It detects the faults only.	
	C) It corrects the faults only.	D
	D) All of the above.	
	When does the circuit breaker operate in the line?	
	when does the cheuit breaker operate in the fille?	
13	A) When power is to be supplied.	
	B) When the line is to be tested.	
	C) Whenever the fault occurs in the line.	
	D) Whenever the switch and the relay has	
	1 /	
	to be operated.	
	Which desires and the inferror of the first	C
	Which device sends the information to the circuit	
	breaker to interrupt the circuit in case of fault?	
	A) Switch	
	B) Relay	
14		
14	C) Circuit breaker itself does this function.	
	D) Fuse.	В
	Outdoor switchgear is generally used for voltage	
	beyond	
15	A) 11 KV	Γ
1.5	1 X J 1 1 1 X V	

	1_; -, -,-	1
	B) 33 KV	
	C) 66 KV	
	D) 132 KV	
	D) 132 K V	
	Purpose of backup protection is	
	1 -	
	A) To increase the speed	
16	B) To increase a reach	
	C) To leave no blind spot	
	D) To guard against	
	failure of primary	D
	Switching over voltage arc are more hazardous than	
	lighting surges in case of	
1.7	lighting surges in ease of	
17	ANTILL	
	A) Unbalanced systems	
	B) Low-voltages	D
	C) 11 KV systems	
	D) EHV and UHV systems	
	,	
	Least number of faults are generally reported for	
18	A) Transmission lines	
	B) Cables	
	C) Switchgears	
		D D
	D) Transformers	В
	Dhua satting of a malay sam ha shamand by shamain a	
	Plug setting of a relay can be changed by changing	
	A) Air gap	
19	B) Back up stop	
	C) Number of	
	amphere turns	
	D) All of these	C
	b) Thi of these	
	Basic relay connection requirement is that the relay	
	must operate for	
20	A) Load	
20		
	B) Internal faults	
	C) Both (a) and (b)	В
	D) None of these	
	In a star connected system without neutral grounding,	
21	zero sequence currents are	
	A) Zero	
	B) Phaser sum of phase currents	
	C) Same as r.m.s value of phase currents	
	D) Same as peak value of phase currents	_
		A
	The advantage of neutral earthing	
	·	

	<u>†</u>	
22	A) Safety of personnel B) Reduction of earth fault current C) Elimination of arcing ground D) None of the above	
	b) None of the above	С
	The neutral wire is coloured	
23	A) Black B) Blue	
	C) Red D) Yellow	A
	Earthing is necessary to give protection against	
24	A) Danger of electric shock B) Voltage fluctuation	
	C) Overloading D) High temperature of the conductors	A
	Solid grounding is addopted for voltages below	
25	A) 100 V B) 200 V	
	C) 400 V D) 660 V	D
26	The advantage of neutral earthing is	
20	A) Freedom from persistent arcing grounds B) Over voltages due to lightning	
	can be discharged to earth C) Simplified design earth fault protection D) All of the above	D
27	A Three phase transformer having a line voltage ratio of 400/33000 V is connected in the star-delta. The CTs on the 400V side have a CT ratio of 1000/5. What must be the ratio of CTs on the 33000 side? A) 7/5 B) 5/7 C) 3/5	
	D) 5/2	A
28	A Three phase transformer having a line voltage ratio of $400/33000$ V is connected in the star-delta. The CTs on the 400 V side have a CT ratio of $1000/5$. What will be the current through the pilot wire? A) $5\sqrt{3}$ A	

	B) $5/\sqrt{3}$ A	
	C) 5 A	
	D) 1/5 A	A
	The neutral of the three phase 20 MVA, 11kV	
	alternator is earthed through a resistance of 5 ohms, the	
29	relay is set to operate when there is an out of balance	
	current of 1.5 A. The CTs have a ratio of 100/5. What	D
	percentage of the winding is protected against L-G	
	faults?	
	A) 76.4	
	B) 77.8	
	C) 73	
	D) None of the mentioned	
	The neutral of the three phase 20 MVA, 11kV	
	alternator is earthed through a resistance of 5 ohms, the	
30	relay is set to operate when there is an out of balance	
	current of 1.5 Å. The CTs have a ratio of 100/5. What	
	percentage of the winding is protected against earth	
	faults?	
	A) 76.4	A
	B) 77.8	A
	C) 73	
	D) None of the mentioned	
	If all the sequence voltages at the fault point in a power	
	system are equal, then fault is	
31	A) LLG fault	
	B) LG fault	
	C) Three phase to	
	ground fault	
	D) Line to Line fault	A
	What is the full form of MCB?	
32	A) Miniature contact breaker	
	B) Mini circuit breaker	
	C) Miniature circuit breaker	С
	D) Mini contact breaker	
	Directional relays are based on flow of	
33	A) Power	
	B) Current	
	C) Voltage wave	
	D) All of the above	
		A
	A differential relay measures the vector difference	
34	between	

	A) Two currents	
	B) Two voltages	
	C) Two or more	C
	similar electrical	
	quantities	
	D) None of the above	
	The relay with inverse time characteristic will operate	
35	within	
	A) 1.5 sec	
	B) 5 to 10 sec	
	C) 5 to 20 sec	
	D) 20 to 30 sec	C
	2) 20 10 20 500	_
	Inverse time current relays are used for the protection	
26	_ ·	
36	of	
	A) Feeders	
	B) Transformers	
	C) Alternators	D
	D) Both A and B	D
	,	
	IDMT relays are used to protect the power transformers	
37		
37	against	
	A) External short-circuitB) Over loads	
	C) Internal short-circuits	
	D) Both A and B	D
		D
	distance protection, the relay measures	
38	A) Negative sequence impedance of the	
	light from relay up to the fault point	
	B) Positive sequence impedance of the line from	
	relay up to the fault point	
	C) Self impedance of the line from relay up to the	
	fault point	
	=	
	D) Zero sequence impedance of the	В
	line from relay up to the fault point	D
	The relay used for phase fault protection of short	
	transmission lines is	
39		
	A) Reactance relay	
	B) Impedance relay	
	C) Mho relay	
	D) IDMT relay	A
	D) IDIVIT ICIAY	
	Where gavers gynchroniging gyving account he releve	
	Where severe synchronising swing occur, the relay	

	amployed is	
40	employed is	
40	A) Impedance relay	
	B) Mho relay	В
	C) Reactance relay	D
	D) Induction relay	
	b) induction relay	
	For the protection of lines against faults involving	
	variable fault resistance, the preferred relaying scheme	
41	is a	
	A) Plain impedance relay	
	B) Directional over-current relay	
	C) Mho relay	
	D) Reactance relay	D
43	For ground fault we prefer	
43	A) Plain impedance relay	
	B) Directional over current relay	
	C) Mho relay	D
	D) Reactance relay	
	Admittance relay	
44		
	A) Nondirectional relay	
	B) Directional relay	В
	C) Differential relay	D
	D) None of the above	
	For the protection of stator winding of an alternate	
4.5	against internal fault involving ground the relay used is	
45	a	
	A) Biased differential relay	
	B) Directional over-current relay	
	C) Plain impedance relay	
	D) Buchholz relay	A
	D) Buchholz Iclay	11
	For the protection of a large squirrel cage induction	
	motor against single phase normally	
46		
	A) An over-current relay is used	
	B) Differential relay is used	
	C) Directional relay is used	
	D) Negative sequence current sensitive relay is used	5
		D
	Inverse time current relays are used for the protection	

Subi	iect	Name	R	Code
Sub	ccı	Name	œ	Couc

	C) Mho relay	D
	D) Reactance relay	D
	b) Reactance Telay	
	For ground fault we prefer	
53		
	A) Plain impedance relay	
	B) Directional over current relay	
	C) Mho relay	
	D) Reactance relay	D
	Admittance relay	
54		
	A) Nondirectional relay	
	B) Directional relay	
	C) Differential relay D) None of the above	В
	b) None of the above	
	Buchholz relay is used to protect against	
55	A) Inter-turn fault	
	B) External faults	
	C) Rotor faults	_
	D) Every internal faults	D
	Instantaneous relay should operate within	
56	A) 0.0001 sec	
	B) 0.001 sec	
	C) 0.01 sec	_
	D) 0.1 sec	C
	Which of the following is a directional relay?	
57	A) Reactance relay	
	B) Mho relay	
	C) Reactance relay	D
	D) Both (b) and (c)	
	Which of the following is an instantaneous relay?	
58	A) Induction type	
	B) Shaded pole type	
	C) Thermocouple type	_
	D) Permanent magnet moving coil type	D
	Who invented electrical relay?	
59	A) Grueblerowen	
	B) Joseph Henry	_
	C) Philip Vaughan	В
	D) Robert Abalakov	
60	What is the full form of MCB?	
60	A) Miniature contact breaker	
	B) Mini circuit breaker	

		1
	C) Miniature circuit breaker	
	D) Mini contact breaker	C
	Which electrical relay contact tip material has the	
61	highest electrical conductivity?	
	A) Silver	
	B) Alloy of silver and copper	
	C) Alloy of	
	silver and tungsten	A
		A
	D) Alloy of silver and Nickel	<u> </u>
	Electro mechanical relay's (EMR) needs to be	
62	manually turned "ON" and "OFF".	
	A) True	
	B) False	A
	Plug setting of a electromagnetic relay can be altered	
63	by varying	
05	by varying	
	A) Number of amora turns	
	A) Number of ampere turns	
	B) Air gap of magnetic path	
	C) Adjustable back stop	A
	D) None of these	
	A transmission line is protected by	
64	A) Inrush protection	
	B) Distance protection	
	C) Time graded and current graded over	
	current protection	
	D) Both (b) and (c)	D
	Large internal faults are protected by	
65	A) Merz price percentage differential protection	
0.5		
	B) Mho and ohm relays	
	C) Horn gaps and temperature relays	
	D) Earth fault and positive sequence relays	A
	When a transmission line is energized, the wave that	
66	propagates on it is	
	A) Current wave only	
	B) Voltage wave only	
	C) Both (a) and (b)	
	D) Power factor wave only	C
	For which of the following protection from negative	
67	sequence currents	
	is provided?	
	1 *	
	A) Generators	
	B) Motors	
	C) Transmission line	A
	D) Transformers	

	Relay is preferred for phase fault on short transmission	
68	line.	
	A) Induction type	
	B) Reactance	
	C) Impedance	В
	D) None of the above	
	For which of the following ratings of the transformer	
69	differential	
O J	protection is recommended?	
	A) Above 30 kVA.	
	B) Equal to and above 5 MVA	
	C) Equal to and above 25 MVA	
	D) None of the above	
	,	В
	The Undervoltage relay can be used for	
70	A) Generators	
, -	B) Busbars	
	C) Transformers	
	D) Motors	
	E) All of the above	Е
	We do not require any protection against prime mover	
71	failure in case of	
	A) Turbo generator sets	
	B) Hydro generator sets	
	C) Diesel engine driven alternators	
	D) Back pressure turbo generators	
		A
	The most commonly used method for the protection of	
72	three phase feeder is	
	A) Time graded protection	
	B) Differential protection	
	C) Reverse power protection	В
	D) None of the above	
	Which is the pilotless protection method for fooder line	
73	Which is the pilotless protection method for feeder line	
13	'	
	A) Differential protection	
	B) Carrier current protection	
	C) Time credit protection	В
	D) None of the above	
	Time graded protection of a radial feeder can be	
74	achieved by using	
<i>,</i> ¬	define ved by using	

	A) Definite time relay	
	B) Inverse time relay	
	C) Both definite and	С
	/	C
	inverse time relays	
	D) None of the above	
	Pilot-wire protection scheme is the most economical	
75	and provides high speed relaying for	
'	and provides high speed relaying for	
	A) Cl. (1 (1 Cl) (171	
	A) Short length of lines upto 15 km	
	B) Medium length of lives up to 60 km	
	C) Long length of lines up to 200 km	
	D) All of the above	
	b) In or the doore	A
	D: 4	
_	Distance protection scheme is preferred over graded	
76	lime-lag over-current protection in HV and EHV lines	
	because	
	A) It is faster in operation	
	B) It is simple	
	· ·	Α.
	C) It is cheaper in cost	A
	D) All of the above	
	For which of the following ratings of the transformer	
	differential protection is recommended?	
77		
	A) Above 30 KVA	
	B) Equal to and above 5MVA	
	C) Equal two and above 25 MVA	
	D) None of the above	В
		Ь
	Overfluxing protection is recommended for	
78		
	A) Distribution transformer	
	B) Generator transformer of the power plant	
	C) Auto transformer of the power plant	
	D) Station transformer of the power plant	
		В
	The power loss is an important factor for the design of	
79		
	A) Transmission line	
	B) Motor	
	C) Generator	<u></u>
	D) Feeder	В
	In carrier current protection the purpose of the wave	
	trap is for	
80		
	A) Trapping power frequency waves	
	11) Trapping power frequency waves	

	B) Trapping high frequency waves entering	
	into generators/ transformer unit	
	C) Both a and b	
	D) None of the above	В
	As soon as a fault develops in a generator stator, it is	
81	essential to suppress field excitation, otherwise	
	The state of the	
	A) Terminal voltage will drop	
	B) It may lead to loss of synchronism	
	C) It will continue to supply power to the	
	stator winding fault	
	D) All of the above	С
		<u> </u>
	The types of faults that occur in electric motors are	
82		
	A) Stator	
	B) Rotor	
	C) Overload	
	D) All of the above	
		D
	The main function of under voltage protective device	
83	generally employed with a motor starter is to	
	A) Open the supply circuit on failure of	
	power supply	
	B) Control the motor voltage	
	C) Prevent the opening of supply circuit	
	1 2 11 2	
	D) None of the above	A
	The bigs feater S in unit protection symphosocies	
0.4	The bias factor S in unit protection synchronous	
84	generators	
	1.7.1.	
	A) Lies between .05 and .1 Pu	
	B) Is less than .05 Pu	
	C) Lies between .1 to .25 Pu	
	D) Is greater than .025 Pu	A
	, 5	· -
	The frequency of carrier in the carrier current	
85	pilot scheme is in the range of	
	A) 1 kHz to 10 kHz	
	B) 10 kHz to 25 kHz	
	C) 25 kHz to 50 kHz	D
	D) 50 kHz to 500 kHz	
	The frequency of carrier transmitted by microwave	
	1 and and and an emiliar aminimized by inition wave	

86	pilot is in the range of	
	A) 1000 kHz to 1500 kHz	С
	A) 1000 kHz to 1500 kHz B) 2000 kHz to 5000 kHz	C
	,	
	C) 900 kHz to 6000 kHz	
	D) 10000 kHz to 15000 kHz	
	Problems associated with differential protection is/are	
87	_	
	A) Magnetising inrush current	
	B) Mismatching characteristics of CTs	
	C) Charge of ratio as a result of tapping	
	D) All of the above	D
		D
	For the protection of transformers, harmonic restraint is	
	used to guard against	
88		
	A) Magnetising inrush current	
	B) Unbalanced operation	
	C) Lightning	
	D) Switching over-voltage	A
	If a transformer is provided with differentially	
	connected relay. To prevent the mal operation of the	
89	relay, the relay restraining coil is biased with	
	A) 3rd harmonic	
	B) 2nd harmonic	
	C) 7th harmonic	
	D) 5th harmonic	В
		Б
	Ferroresonanace can be added in	
90	A) Faults due to system	
	B) Faults in the transformer	
	C) Manual faults	
	D) Other faults	
	D) Onle ludio	A
		11
	Transformers are subjected to transients because	
91	.,	
	A) Open-circuit currents	
	B) Short-circuit currents	
	C) Inrush currents	ъ
	D) Both OC and SC currents	D
	D) Both OC and SC currents	
02	Any transformer needs to be protected from	
92		

	A) Transformer faults	
	B) Faults occurring on the transformer	
	connected systems	C
	C) Faults within and on system	C
	1 .	
	D) Other faults	
	Stored oil should be checked continuously for	
93		
	A) Impurities in the oil	
	B) Oil levels	
	C) Oil moisture content	
	D) Oil reactions	C
		C
0.4	The main function of a fuse is to	
94	A) Protect the line	
	B) Open the circuit	
	C) Protect the appliance	
	D) Prevent excessive currents	_
	2) 110, 0110 0110000110 00110110	D
	The arcing contacts in a circuit breaker are made of	
95	A) Copper tungsten alloy	
, ,	B) Porcelain	
	C) Electrolytic copper	Α
	D) Aluminium alloy	
	Arc in a circuit behaves as	
96	A) A Capacitive reactance	
	B) An Inductive reactance	
	C) A Resistance increasing with voltage rise	
	across the arc	
		D
	D) A Resistance decreasing with voltage rise	D
	across the arc	
	The veltere amonine cones the contests often annine	
97	The voltage appearing across the contacts after opening of the	
)		
	circuit breaker is calledvoltage.	
	A) Recovery	
	B) Surge	
	C) Operating	
	D) Arc	
	- /	A
	Ionization in circuit breaker is facilitated by	
98	A) High temperature	
	B) Increase of mean free path	
	C) Increasing field strength	D
	D) All of the above	_
	The arc voltage produced in A.C. circuit breaker	
99	is always	
	A) In phase with the arc current	
	B) Lagging the arc current by 90"	
	1 = 1 = 100 mg me me om on 0 1 / 0	

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	C) Leading the arc current by 90°	A
	D) None of the above H.R.C. fuses provide best protection against	
100	A) Overload	
	B) Reverse current	
	C) Open-circuits	D
	D) Short-circuits	D
101	Wave trap is used to trap waves of	
101	A) Power frequenciesB) Higher frequencies entering	
	generator or transformer units	
	C) Either of the above	D
	D) None of the above	В
	What is the main advantage of using a fuse?	
100	A) Cheapest type of protection.	
102	B) Inverse time current characteristics.	
	C) Current limiting effect under short circuit conditions.	
	D) All of above.	
	<i>D)</i> 1111 of 4 00 (0.	
		D
	On what basis is the selection of fuse done?	
103	A) Steady load.	
	B) Fluctuating load.	
	C) Both (a) and (b) D) None of these.	
	b) None of these.	С
	Upto what voltage a cartridge type of fuse can be used?	
104	A) 400 V	
	B) 11 kV	
	C) 20 kV D) 33 kV	
	D) 33 KV	D
	What is fusing factor?	2
105	A) The ratio of current rating of the fuse	
	to the minimum fusing current	
	B) The ratio of minimum fusing current	
	to the current rating of the fuse	
	C) The ratio of maximum fusing current to the current rating of the fuse	
	D) The ratio of minimum fusing current	В
	to the voltage rating of the fuse	
106	The resistance of an electric arc can be increased by	
100	A) Increasing the concentration of	
	A) Increasing the concentration of ionised particles.	
	B) Reducing the arc length.	
	C) Splitting the arc.	С

	D) Increasing the arc cross section	
107	By using low resistance method for arc extension	
107	what is the value of arc resistance?	
	A) Arc resistance is zero.	
	B) Arc resistance is high	
	C) Arc resistance is low	C
	D) Arc resistance is very high	
108	What happens in the arc extinction using high	
100	resistance method?	
	A) Arc resistance is decreased with time.	
	B) Are resistance is increased with time.	
	C) No change it remains same.	
	D) Arc resistance is keptzero.	В
	The arc resistance depends on which among the	
109	following factors?	
	A) Cross section of the arc.	
	B) Length of the arc.	
	C) Degree of ionization	
	D) All of the above.	
		D
110	Recovery voltage is the value of rms voltage that	
	reappears across the poles of a circuit breaker	
	before	
	A) Restriking voltage	
	B) Final arc extinction	
	C) Rise of voltage	D
	D) All of the above	В
111	Why is it difficult to interrupt a capacitive circuit?	
	A) The current has a leading power factor.	
	B) The restriking voltage can be high.	
	C) Current magnitude is very small.	

	D) Stored energy in the capacitor is very high.	
		В
112	Rate of rise of restriking voltage depend	
112	on?	
	A) Type of circuit breaker.	
	B) Capacitance of the system.	
	C) Inductance of the system.	
	D) Both (b) and (c)	D
	E) None of these	
113	On what factor does the rate of rise of restriking	
113	voltage (RRRV) depend?	
	A) System voltage.	
	B) Circuit power factor only	
	C) Switching conditions	D
	D) Both (b) and (c).	D
114	In a circuit breaker, the active recovery voltage depends	
114	upon which among these?	
	A) Circuit conditions.	
	B) Power factor.	
	C) Both (a) and (b)	~
	D) None of the above	С
115	What is restriking voltage?	
	A) The transient voltage that appears across the	
	circuit breaker contacts at the instant of arc extinction.	
	B) The transient voltage that appears across the	
	circuit breaker contacts at theend of arc extinction.	
	C) Both (a) and (b)	
	D) None of the above	A
	50 Hz 3 phase synchronous generator has inductance	
116	per phase of 15mH. The capacitance of generator and	

	T	
	the circuit breaker is 0.002μ F. What is the natural	
	frequency of oscillation?	
	A) 29 kHz	
	B) 2.9 kHz	
	C) 290 kHz	
	D) 29 MHz	A
	Data of rise of restriking voltage	
117	Rate of rise of restriking voltage	
	depend on?	
	A). Type of circuit breaker.	
	B). Capacitance of the system.	D
	C). Inductance of the system.	
	D). Both (b) and (c)	
110	In a short circuit test on a circuit breaker, the following	
118	readings were obtained on single frequency transients	
	Time to reach the peak restriking voltage - 50µ sec	
	The peak re striking voltage, 100 kV What is its	
	average RRRV?	
	A) 2*10 ⁶ kV/sec	
	B) 3*10 ⁵ kV/sec	A
	C) 2*10 ⁵ kV/sec	
	D) 3*10 ⁶ kV/sec	
	In a short circuit test on a circuit breaker, the following	
119	readings were obtained on single frequency transients	
	Time to reach the peak restriking voltage - 50µ sec	
	The peak re striking voltage, 100 kV What will be the	
	frequency of oscillations?	
		С
	A) 100 Hz	
	B) 1,000 Hz	
	C) 10,000 Hz	
	D) 10 Hz	

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120	The arc resistance depends on which among the	
120	following factors?	
	A). Cross section of the arc.	
	B). Length of the arc.	
	C). Degree of ionization	
	D). All of the above.	
		D
	Solid state relays face high arching problems.	
121	A) True	
	B) False	В
100	Solid state relays have only one moving part which	
122	helps in switching between "ON" and "OFF"	
	position. A) True	
	B) False	В
	Which type of Solid state relay turns "ON" when a	
	minimum operating control voltage is applied and the	
123	load voltage nearly reaches zero?	
	A) Instant ON Relays	
	B) Zero-Switching Relays	
	C) Peak Switching Relays	В
	D) Analog Switching Relays Who developed the first Solid state relay?	
124	A) Grueblerowen	
121	B) Walcraft engineers	
	C) Crydom engineers	C
	D) Robert Conrad	С
	Which is an example of relay?	
125	A) KSD9700	
	B) XMPA06B2131	
	C) SLB700A/06VA	
	D) 792XDXM4L-24A	
	A good electrical relay contact tip should have higher	
126	arc resistance.	
	A) True	
	B) False	
		A
	On which of the following routine tests are conducted	
127	A) Oil circuit breakers	
	B) Air blast circuit breakers	
	C) Minimum oil circuit breakers	
	D) All of the above	D
120	SF6 gas	
128	A) Is yellow in colour	

	1	·
	B) Is lighter than air	
	C) Is nontoxic	С
	D) Has pungent small	
	Circuit breakers usually operate under	
120	· · · · · · · · · · · · · · · · · · ·	
129	A) Transient state of short-circuit current	
	B) Sub-transient state of short-circuit current	
	C) Steady state of short-circuit current	
	D) After D.C. component has ceased	
		A
	Circuit breakers are essentially	
130	A) Current carrying contacts called electrodes	
150	1 '	
	B) Arc extinguishers circuits to break the system	
	C) Transformers to isolate the two systems	
	D) Any of the above	
		A
	The current zero interruption, in oil and air blast circuit	
131	breakers, is	
	achieved by	
	A) Lengthening of the gap	
	B) Cooling and blast effect	
	C) Both (a) and (b)	
	D) Deionizing the oil with forced air	С
	Air blast circuit breaker is used for	
132	A) Over currents	
	B) Short duty	
	C) Intermittant duty	
	1 /	
	D) Repeated duty	D
	The time of closing the cycle, in modern	
133	circuit breakers is	
	A) 0.003 sec	
	B) 0.001 sec	
	C) 0.01 sec	
	D) 0.10 sec	A
	D) 0.10 sec	7.1
	Desigtance of high vertices singuist to 1	
124	Resistance of high voltage circuit breakers is more than	
134	A) 1 mega ohms	
	B) 10 mega ohms	
	C) 100 mega ohms	
	D) 500 mega ohms	C
	The contacts of high voltage switches used in power	
135	system are submerged in oil. The main purpose of the	
133	oil is to	
	A) Lubricate the contacts	
	B) Insulate the contacts from switch body	

	C) Extinguish the arc	С
	D) All of the above	
	Which of the following circuit breakers has high	
136	reliability and minimum maintenance?	
	A) Air blast circuit breakers	
	B) Circuit breaker with SF6 gas	
	C) Vacuum circuit breakers D) Oil circuit breakers	В
	Keeping in view the cost and the overall effectiveness,	
137	which of the following circuit breaker is best suited	
	for capacitor bank switching?	
	A) Vacuum circuit breaker	
	B) Air blast CB	_
	C) SF6	A
	D) Oil CB	
	During arc extinction SF6 gas gets converted to which	
138	among these?	
	A) Gets decomposed to SF4 and SF2	
	B) Gets decomposed to Sand F	
	C) Gets reduced to SF6	
	D) Gets oxidized	A
139	Is the normal pressure at which the SF6 gas is	
139	maintained in the closed position of the breaker?	
	A)2 kg / cm2	
	B) 2.5 kg/cm2	
	C) 2.8 kg / cm2	
	D) 3 kg / cm2	С
	What is the major drawback of using SF6	
140	circuit breakers A)Sealing problems of the gas.	
	B) Ingress of moisture in the gas system – dangerous.	
	C) Deterioration of SF6 gas with time.	
	D) Both (a) and (b)	D
141	Why do the SF6 gases have an excellent heat transfer	
	property A)Low gaseous viscosity.	
	, , U	

	B) High dielectric strength. C) Higher molecular weight. D) Both (a) and (b)	
	D) Both (a) and (c)	D
142	What is the breaking capacity of the air blast circuit breaker	
ı	A) 5000 MVA	
	B) 6000 MVA	
	C) 7000 MVA	
	D) 10000 MVA	C
	Avial blast tyme of CD, avnancian of air takes place	
143	Axial blast type of CB, expansion of air takes place from	
	A) High pressure to low pressure.	
	B) Low pressure to high pressure.	
	C) Always in high pressure.	
	D) Always in low pressure.	A
144	The air blast circuit breakers for 400 kV systems are	
177	designed to operate in how much time?	
	A) 0.1 s	
	B) 0.5 s	
	C) 50 ms	
	D) 100µs	C
145	When using air blast circuit breaker, current chopping	
143	is a phenomenon observed when	
	A) ALong overhead line is switched off.	
	B) A Bank of capacitors is switched off.	
	C) A Transformer on no load is switched off.	
	D) A Heavy load is switched Off.	
		C
146	Which type of air is used in air blast circuit breaker?	<u> </u>

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	A) Ionised air	D
	B) Air free from moisture	В
	c) Air should have least CO ₂ D) Air must have oil mist	
	The interrupting time of a circuit breaker is the	
147	period between the instant of	
	A) Initiation of short circuit and the arc	
	extinction on an opening operation.	
	B) Energizing the trip circuit and the arc	
	extension on an opening operation. C) Initiation of short circuit and the	
	C) Initiation of short circuit and the parting of primary arc contacts.	
	D) Energizing of the trip	В
	circuit and the parting of	
	primary arc contacts	
	In a circuit breaker, ionisation is facilitated	
148	by	
	A) Increase in field strength.	
	B) Increase in mean free length.	
	C) High temperature of the surrounding medium.	
	D) All of the above.	D
1.40	The heat produced at the contact point owing to flow of	
149	electric current is least affected	
	by	
	A) Temperature of the surrounding medium.	
	B) Contact resistance.	A
	C) Magnitude of electric current flowing.	
	D) Duration of flow of current.	
	, '	
150	Which part of the circuit breaker is helpful in breaking	
150	the current?	
	A) Trip coil	
	B) Contacts	
	C) Medium	В
	D) Handle	D