Test	Booklet	Code	B

# **TEST PAPER**

Marks: 100

Time: 60 minutes

ROLL NO.:	NAME:
SIGNATURE:	DATE / TIME:

	INSTRUCTIONS FOR THE CANDIDATES				
1.	Before attempting the paper carefully read out all the Instructions & Examples given on Side 1 of Answer Sheet (OMR Sheet) supplied separately.				
2.	At the start of the examination, please ensure that all pages of your Test booklet are properly printed; your Test booklet is not damaged in any manner and contains 100 questions. In case of any discrepancy the candidate should immediately report the matter to the invigilator for replacement of Test Booklet. No claim in this regard will be entertained at the later stage.				
3.	An <b>OMR Answer Sheet</b> is being provided separately along with this Test booklet. Please fill up all relevant entries like Roll Number, Test Booklet Code etc. in the spaces provided on the OMR Answer Sheet and put your signature in the box provided for this purpose.				
4.	Make sure to fill the correct Test booklet code on Side 2 of the OMR Answer Sheet. If the space for the Booklet Code is left blank or more than one booklet code is indicated therein, it will be deemed to be an incorrect booklet code & Answer Sheet will not be evaluated. The candidate himself/herself will be solely responsible for all the consequences arising out of any error or omission in writing the test booklet code.				
5.	This Test Booklet consists of 08 pages containing 100 questions. Against each question four alternative choices (1), (2), (3), (4) are given, out of which one is correct. Indicate your choice of answer by darkening the suitable circle with BLACK/BLUE pen in the OMR Answer Sheet supplied to you separately. Use of Pencil is strictly prohibited. More than one answer indicated against a question will be deemed as incorrect response.				
6.	The maximum marks are 100. Each question carries one mark. There will be no negative marking. The total time allocated is 60 minutes.				
7.	Do not fold or make any stray marks on the OMR Answer Sheet. Any stray mark or smudge on the OMR Answer Sheet may be taken as wrong answer. Any damage to OMR Answer Sheet may result in disqualification of the candidate.				
8.	On completion of the test, candidate must hand over the OMR Answer Sheet to the invigilator on duty in the room/hall.				
9. 10.	Use of Mobile phones and calculators etc. are not allowed. Keep all your belongings outside the Examination hall. Do not retain any paper except the ADMIT CARD.				

1	In ring main distribution systems, the distributor is fed				
	(1) By one feeder (2) By two feeders	(3) At different points	(4) By four feeders		
	Spot pricing is about				
2	(1) Power factor improvement	(2) kVA demand reduction			
~	(3) Tariff/ rate at different times	(4) Generation cost reduction			
	A synchronous machines has higher capacity for				
2	(1) Leading power factor	(2) Lagging power factor			
3	(3) Does not depend upon the power factor of machine	(4) None of the above			
	A separately excited dc generator is running at rated	speed and at no load. If its fi	eld winding is suddenly		
	connected to a dc source then rise in armature generated	l voltage is governed by			
1	(1) Armature time constant	(2) Field time constant			
4	(3) Both (a) and (b)	(4) Mechanical time constant			
	A 1-phase, 7.46 kW motor is supplied from a 400 V, 50	Hz A.C mains. Its efficiency is	85% and power factor is		
5	0.8 lagging. Calculate the KVA input				
5	(1) $9.56 \text{ kVA}$ (2) $5.4 \text{ Kva}$	(3) 10.97 kVA	(4) 8.6 kVA		
6	Heat control switches are used in				
0	(1) Transformer (2) Cooling ranges	(3) 3-phase induction motors	(4) 1-phase motors		
	In permanent magnets, the desired features are				
-	(1) High retentivity, low corecitivity	(2) Low retentivity, high corec	itivity		
	(3) Low retentivity, low corecitivity	(4) High retentivity, high corec	citivity		
	Which of the following alternatives will be cheaper		5		
0	(1) A 100 h.p AC, 3-phase motor	(2) Four motors of 25 h.p each			
8	(3) Five motors of 20 h.p each	(4) 10 motors of 10 h.p each			
	The efficiency of modern steam turbines is about				
9		(3) 75%	(4) 90%		
	One 200 V. 100 W bulb is connected in series with primary of a 200 V. 10 kVA transformer. If its secondary is				
	kept open circuited, then the bulb would have	-	·		
10	(1) Full brightness	(2) Poor brightness			
10	(3) A little less than full brightness	(4) More than full brightness			
	Two monthly tariff are offered as				
	Rs 3000+Rs 0.90/kWh				
	Rs 3/kWh				
11	At what consumption/ month is tariff (i) is more suitable	e for consumer			
	(1) 1526.8 kWh (2) 1428.6 kWh	(3) 1450.4 kWh	(4) 1582.4 kWh		
12	A diesel plant has good efficiency at				
12	(1) Plant load (2) Half load	(3) Full load	(4) None of the above		
13	The maximum demand of consumer is 2 kW and his dat	ly energy consumption is 20 uni	ts. Its Load Factor is		
10	(1) 10.15% (2) 41.6 %	(3) 50 %	(4) 60%		
14	Pelton turbine is used for water head is				
	(1) >200 m (2) $30-200 \text{ m}$	(3) < 30  m	(4) <100 m		
	Filament lamp at staring will take current				
15	(1) Less than its full running current	(2) Equal to its full running cur	rrent		
	(3) More than its full running current	(4) None of the above			
	When a resistance element of a heater gets fused. We remove a portion of it and reconnect it to the same supp				
	When a resistance element of a heater gets fused. We re	move a portion of it and recomm	cet it to the same suppry,		
16	the power drawn by the heater will		cet it to the same suppry,		

	The most appropriate operating speeds in rpm of generators used in thermal, nuclear and hydro power plants			
	would respectively be			
17	(1) 3000, 3000 and 1500		(2) 3000, 3000 and 3	00
17	(3) 1500, 1500 and 500		(4) 1000, 900 and 75	0
18	Power factor of run	ning induction motor is better	when	
10	(1) Running at half	load (2) Full load	(3) <sup>3</sup> / <sub>4</sub> of load	(4) None of the above
10	Electric are welding	process produces temperature	e up to	
19	(1) $1000^{\circ}$ C	(2) $1500^{\circ}$ C	(3) $3500^{\circ}$ C	(4) $5550^{\circ}$ C
	For internal faults in	n generator, the primary protec	ction is provided by	
20	(1) Earth fault relay (2) Differential relay			
20	(3) Induction type in	3) Induction type inverse definite minimum time relay (4) Definite minimum time		minimum time relay
	Luminous flux is		•	
	(1) The light energy	radiated by sun		
	(2) The part of light	energy radiated by sun, which	h is received on the earth	
01	(3) The rate of energy	gy radiation in the form of light	nt waves	
21	(4) None of the abo	ve		
	If X is the system re	actance and R is its resistance	e, the power transferred is ma	aximum when
22	(1) X=R	(2) X=1.414 R	(3) X=1.732 R	(4) X=2R
	The all-day efficient	cy of a transformer is the ratio	o of	0
00	(1) kWh output and	kWh input per day	(2) kWh output and k	Wh input in a day
23	(3) output power an	d input power	(4) input power and c	output power
	The efficiency of a	transformer at full load0.8 p.	f lagging is 90%. Its efficien	ncy at full load 0.8 p.f leading will
0.1	be	1		
24	(1) Less than 90%	(2) More than 90%	(3) 90%	(4) None of these
05	Doherty rate is suita	ible for		
25	(1) Industrial custor	ners (2) Domestic customer	s (3) Agricultural custor	mers (4) Commercial customers
	For blowers which o	of the following motor is prefe	erred?	
00	(1) D.C. series moto	or	(2) D.C. shunt motor	
26	(3) Squirrel cage ind	duction motor	(4) Wound rotor indu	action motor
07	A meter whose cons	stant is 600 revolutions/kWh r	nakes 5 revolutions in 20 sec	conds. Calculate theload in kW.
21	(1) 0.5 kW	(2) 1 kW	(3) 1.5 kW	(4) 2 kW
	An alternator with	frequency f1 is to be syn	chronized with an infinite	bus of frequency f. For proper
00	synchronization	1 7 7		
28	(1) f1=f	(2) f1 <f< td=""><td>(3) f1&gt;f</td><td>(4) either (b) or (c)</td></f<>	(3) f1>f	(4) either (b) or (c)
	Short-circuit kVA is	s obtained by multiplying the	base kVA by	
29	(1) 10% X	(2) $20\% X$	(3) $50\% X$	(4) 100% X
20	The most commonly	y used moderator material in r	nuclear plant is	
30	(1) Carbon	(2) Water	(3) $Co_2$	(4) Liquid metal
01	The overall efficient	cy of thermal station is	<u> </u>	
31	(1) 40%	(2) Less than 40%	(3) More than 40%	(4) 50%
	Light duty cranes ar	e used in which of the followi	ing?	
32	(1) Power houses	(2) Pumping stations	(3) Automobile work	(4) All of the above
	A transformer when	n supplying a load, maintaine	d at 11 kV across load termi	nals. When the load was switched
	off, the terminal vol	tage becomes 11550 V, what	is the voltage regulation at th	nis load?
22	(1) 11.55 %	(2) 5.5%	(3) 5%	(4) 55%
33				
04	The power factor of a spot welding machine is expected to be around			
34	(1) Unity	(2) 0.8 lagging	(3) 0 3 0 5 lagging	(1) 0.8 leading

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0.5	In induction heating, the depth upto which the current	will penetrate is proportional to			
35	(1) $f$ (2) $f^2$	(3) 1/ <i>f</i>	(4) <b>1/√</b> <i>f</i>		
	While selecting motor for an A.C which of the following characteristics is of great importance				
36	(1) Type of bearings	(2) Type of enclosure			
	(3) Noise	(4) Arrangement for power tra	nsmission		
	The staring torque in case of centrifugal pumps is gene	erally			
27	(1) Less than running torque	(2) Same as running torque			
37	(3) Slightly more than running torque	(4) Double the running torque			
	Transformer voltage is maximum when two coils are				
20	(1) Normal to each other	(2) Aligned along the same ax	is		
50	(3) $60^{\circ}$ away from each other	(4) $270^{\circ}$ away from each other			
	A dc shunt motor runs at 500 r.p.m at 220 V. A resista	nce of 4.5 $\Omega$ is added in series w	ith the armature for speed		
39	control. The armature resistance is 0.5 ohms. The curr	ent to stall the motor will be			
55	(1) 44 A (2) 50 A	(3) 44.4 A	(4) 60 A		
	In sodium vapour lamp the function of the leak transfe	ormer is			
40	(1) To stabilize the arc	(2) To increase the supply volt	tage		
-0	(3) Both (a) and (b)	(4) None of the above			
	In the equivalent circuit of a 3-phase induction motor,	the mechanical load on the moto	or can be represented by a		
41	resistance of value				
	(1) $R_2$ (2) $R_2/S$	(3) $R_2(1-S)/S$	(4) $(R_2/S)+1$		
	The direction of rotation of an ordinary shaded pole si	ngle phase induction motor			
	(1) Can be reversed by reversing the supply terminal c	onnections to the stator winding			
	(2) Cannot be reversed				
42	(3) Can be reversed by open circuit the shading rings				
	(4) Can be reversed by short circuit the shading rings				
43	The most efficient from of damping employed in elect	rical instruments is			
43	(1) Air friction (2) Fluid friction	(3) Eddy current	(4) None of the above		
44	The diameter of the rotor shaft for an electric motor de	pends on which of the following			
	(1) rpm only (2) hp only	$(3) hp and rpm \qquad (4) hp, t$	rpm and Power factor		
45	For a normal wire, the approximate value of fusing cur	rrent is given by			
	(1) $I = K(d)^{3/2}$ (2) $I = K(d)^3$	(3) $I = K(d)^{3/4}$	(4) $I = (K d)^{3/2}$		
	Cost of low voltage capacitor /kVAr is				
46	(1) More than cost of high voltage capacitor/kVAr	(2) Is independent of voltage l	evel		
10	(3) Less than cost of high voltage capacitor/kVAr	(4) Is function of size of capac	eitor		
	During 3-phase short circuit on a unloaded alternator,	the dc component may be zero in			
47	(1) One phase only	(2) Any two phases			
	(3) All three phases	(4) None of the above			
	Transformer zero voltage regulation occurs at				
48	(1) Unity power factor	(2) Leading power factor			
	(3) Lagging power factor	(4) Zero power factor leading			
49	Which of the following is not equivalent to watts?				
	(1) Amperes*volts (2) (Amperes) <sup>2</sup> *ohm	(3) Amperes/volt	(4) Joules per second		
	When two alternators A and B are operating in paral	lel, the increase in steam supply	to alternator A will cause		
	the active power output of				
	(1) Alternator A to be decreased and alternator B to be increased				
	(2) Alternators A and B is not affected				
50	(3) Alternators A and B is increased				
	(4) Alternator A to be increased and alternator B to be	decreased			

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The correlation between utilization factor, load factor and capacity factor is					
- /	(1) Utilization factor=1	load factor*capacity factor	(2) Capacity factor= Utilizat	ion factor*load factor	
51	(3) Capacity factor=Ut	tilization factor/Load factor	(4) Load factor=Utilization f	factor*capacity factor	
-	A moving coli ammeter has a fixed shunt of $0.02$ Q with a coil circuit resistance of R=1 kQ and needs potential				
	of 0.5 V across it for f	ull scale deflection Calculate th	e value of shunt to give full sca	le deflection when the total	
or 0.5 v across it for run scale deflection. Calculate the value of shuft to give run scale deflection w					
52	(1) 0.05 0	$(2) 0.005 \Omega$	(3) 0.5 O	(4) 0 0005 0	
-	Moving iron instrume	$(2) 0.003 s_2$	(3) 0.3 22	(+) 0.0003 22	
	(1) Direct currents and	voltages	(2) Padio fraquancy currents	,	
53	(1) Direct currents and $(3) \land C$ currents and $y$	altagas	(2) Radio frequency currents (4) Both (a) and (a)		
	(3) A.C currents and v	is corriad by	(4) Both (a) and (c)		
	(1) Deversing only the	field and armature polarity			
	(1) Reversing only the	field polority			
	(2) Reversing only the				
54	(3) Reversing only the	armature polarity			
	(4) Disconnecting the	armature from supply and conne	cting across a resistance	1	
55	If supply voltage decre	eases by 4% the torque in 3-phas	e induction motor would decrea	ase by	
	(1) 4%	(2) 16%	(3) 8%	(4) 7.84%	
	The ratio of the prima	ry to secondary voltage of a tran	sformer is 2:1. The saving in th	e turns of weight of copper	
56	required if an autotran	sformer is used instead of two w	inding transformer is		
	(1) 50%	(2) 33.33%	(3) 66.67%	(4) 97%	
57	Which of the following	g methods of heating is not depe	ndent on the frequency of supp	ly	
	(1) Induction heating	(2) Dielectric heating	(3) Electric resistance heatin	g (4) All of the above	
	An alternator is conne	ected to a bus. For a symmetric	al fault at the bus, the fault le	vel is 60 MVA. If another	
58	alternator is connected	to the same bus, the new fault 1	evel will be		
	(1) 120 MVA	(2) 60 MVA	(3) 30 MVA	(4) 15 MVA	
59	Synchronous motor is	found more economical when th	e load is above		
55	(1) 2 kW	(2) 20 kW	(3) 50 kW	(4) 100 kW	
60	The maximum torque	that a synchronous motor can de	liver is proportional to		
00	$(1) 1/V^2$	(2) 1/V	(3) V	(4) $V^2$	
61	Ash content of Indian	coal is			
01	(1) 40%	(2) 50%	(3) 35%	(4) 45%	
	the division of active r	ower amongst alternators running	ng in parallel depends upon		
	(1) speed-load charact	eristics of prime mover	(2) V-I characteristics of alte	ernator	
62	(3) Excitation voltages	s of alternators	(4) Both (b) and (c)		
	Pumped storage plant	is suitable for			
63	(1) Peak loads	(2) Off peak loads	(3) Average load	(4) Medium load	
	The tariff generally us	ed for tubewell loads is	(5) Hveruge Iouu		
64	(1) Flat demand	(2) Straight meter rate	(3) Block meter	$(\Lambda)$ None of the above	
	The electrode of a dire	(2) Straight meter rate	(3) Block meter	(4) None of the above	
65	(1) Tungston	(2) Graphita	(2) Silver	(1) Coppor	
	(1) Tungsten The number of noralle	(2) Oraphite	(3) Silver	(4) Copper	
	and adda is	a pauls in armature winding of	rour pole wave winding conne	cied de machine naving 22	
66		(2) 22	(2) 2	(4) 11	
	(1)4 Demostic		(3) 2	(4) 11	
67	Domestic consumers a	re charged at			
	(1) Block meter rate	(2) Flat demand	(3) Two part tariff	(4) Straight rate meter	
Which of the following is present inside the fluorescent tube					
68	(1) Argon and neon	(2) Argon and $co_2$	(3) Mercury vapour	(4) Helium and oxygen	
1	1				

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	The coolant used in	i Nuclear power stations is			
	(1) Hydrogen	(2) $CO_2$	(3) Lithium	(4) Neon	
70	Differential protection is used for protection against				
10	(1) Phase fault	(2) Unbalanced voltage fault	(3) Unbalanced Current fault	(4) Overcurrent fault	
	A synchronous machine with large SCR has				
71	(1) Poor voltage reg	gulation	(2) Poor stability		
/1	(3) Low short circu	it current	(4) More synchronizing power		
	The main function	of economizer of a boiler in a plant	is to		
70	(1) Increase steam	production	(2) Reduce fuel consumption		
72	(3) Increase stem p	ressure	(4) Increase life of the boiler		
	The supply both to	field and armature circuits are disc	connected simultaneously in a ser	parately excited dc motor	
	and it comes to a st	tandstill in 5 sec. If the armature cit	cuit of this motor is disconnected	d from supply with field	
	circuit remaining er	nergized the motor would come to a	rest in	a mom suppry with nora	
73	(1) 5 sec	(2) 7 sec	$(3) 4 \sec \alpha$	(4) A very long time	
	In case of a power t	transformer, the no load current in the	arms of roted current is	(+) IT very long time	
74	(1) 10 20%	(2) 15 30%	(3) 2.6%	(1) 30 50%	
	(1) 10-20%	(2) 13-30%	(3) 2-0%	(4) 50-30%	
75	which of the follow	ving lamp cannot sustain much volta	age fluctuations		
	(1) Sodium vapour	lamp (2) Mercury vapour lamp	(3) Incandescent lamp (4	) Fluorescent lamp	
76	Use of synchronous	s condenser improves			
	(1) Power factor	(2) System stability	(3) Reduces losses	(4) All of the above	
77	Short circuit in a sy	stem causes which type of faults			
	(1) Series	(2) Shunt	(3) Symmetrical	(4) All of the above	
	A star arrangemen	t of resistances has branch resistan	nce of 3 $\Omega$ . The equivalent delt	a arrangement will have	
78	resistance of values	3			
78	resistance of values $(1) 9 \Omega$	β (2) 6 Ω	(3) 3 Ω	(4) 1 Ω	
78	The welding load is $(1) 9 \Omega$	$\frac{(2) 6 \Omega}{\text{s always}}$	(3) 3 Ω	(4) 1 Ω	
78	The welding load is $(1)$ Continuous but	<sup>3</sup> (2) 6 Ω s always varying	<ul><li>(3) 3 Ω</li><li>(2) Continuous and constant</li></ul>	(4) 1 Ω	
78 79	The welding load is (1) Ontinuous but (3) Intermittent	s (2) 6 Ω s always varying	<ul> <li>(3) 3 Ω</li> <li>(2) Continuous and constant</li> <li>(4) None of the above</li> </ul>	(4) 1 Ω	
78 79 80	The welding load is (1) 9 $\Omega$ The welding load is (1) Continuous but (3) Intermittent The vapour dischar	(2) 6 Ω s always varying ge tube used for domestic lighting h	<ul> <li>(3) 3 Ω</li> <li>(2) Continuous and constant</li> <li>(4) None of the above</li> </ul>	(4) 1 Ω	
78 79 80	The welding load is (1) 9 $\Omega$ The welding load is (1) Continuous but (3) Intermittent The vapour dischar (1) No filament	s (2) 6 Ω s always varying ge tube used for domestic lighting h (2) One filament	<ul> <li>(3) 3 Ω</li> <li>(2) Continuous and constant</li> <li>(4) None of the above</li> <li>(3) Two filament</li> </ul>	<ul> <li>(4) 1 Ω</li> <li>(4) Three filament</li> </ul>	
78 79 80	The welding load is (1) 9 $\Omega$ The welding load is (1) Continuous but (3) Intermittent The vapour dischar (1) No filament The changes in real	<ul> <li>(2) 6 Ω</li> <li>s always varying</li> <li>rge tube used for domestic lighting h (2) One filament</li> <li>l bus power affects mainly</li> </ul>	<ul> <li>(3) 3 Ω</li> <li>(2) Continuous and constant</li> <li>(4) None of the above</li> <li>(3) Two filament</li> </ul>	<ul><li>(4) 1 Ω</li><li>(4) Three filament</li></ul>	
78 79 80	The welding load is (1) 9 $\Omega$ The welding load is (1) Continuous but (3) Intermittent The vapour dischar (1) No filament The changes in real (1) the bus voltage	<ul> <li>(2) 6 Ω</li> <li>s always varying</li> <li>ge tube used for domestic lighting h</li> <li>(2) One filament</li> <li>l bus power affects mainly phase angles</li> </ul>	<ul> <li>(3) 3 Ω</li> <li>(2) Continuous and constant</li> <li>(4) None of the above</li> <li>(3) Two filament</li> <li>(2) bus voltage magnitude</li> </ul>	<ul><li>(4) 1 Ω</li><li>(4) Three filament</li></ul>	
78 79 80 81	The welding load is (1) 9 $\Omega$ The welding load is (1) Continuous but (3) Intermittent The vapour dischar (1) No filament The changes in real (1) the bus voltage (3) reactive line flo	<ul> <li>(2) 6 Ω</li> <li>s always varying</li> <li>rge tube used for domestic lighting h         (2) One filament</li> <li>l bus power affects mainly         phase angles         ws</li> </ul>	<ul> <li>(3) 3 Ω</li> <li>(2) Continuous and constant</li> <li>(4) None of the above</li> <li>(3) Two filament</li> <li>(2) bus voltage magnitude</li> <li>(4) none of the above</li> </ul>	<ul><li>(4) 1 Ω</li><li>(4) Three filament</li></ul>	
78 79 80 81	The welding load is (1) 9 $\Omega$ The welding load is (1) Continuous but (3) Intermittent The vapour dischar (1) No filament The changes in real (1) the bus voltage (3) reactive line flo The torque product	<ul> <li>(2) 6 Ω</li> <li>s always varying</li> <li>ge tube used for domestic lighting h</li> <li>(2) One filament</li> <li>l bus power affects mainly phase angles</li> <li>ws</li> <li>we din a 4-pole machine is 100 N</li> </ul>	<ul> <li>(3) 3 Ω</li> <li>(2) Continuous and constant</li> <li>(4) None of the above</li> <li>(3) Two filament</li> <li>(2) bus voltage magnitude</li> <li>(4) none of the above</li> <li>If machine is re-wound wi</li> </ul>	<ul> <li>(4) 1 Ω</li> <li>(4) Three filament</li> <li>th 6 ploes, other things</li> </ul>	
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	A reluctance motor			
87	(1) Is provided with slip rings	(2) Requires starting g	ear	
07	(3) Has high cost	(4) Is compact		
88	For precision work, the illumination level required is of the order of			
00	(1) 500-1000 lumens/m <sup>2</sup> (2) 200-400 lumens/m <sup>2</sup>	(3) 50-100 lumens/ $m^2$	(4) 10-25 lumens/m <sup>2</sup>	
	100. A series R-L circuit is suddenly connected to d	.c. voltage source of V	volts. The current in this series	
89	circuit, just after the switch is closed, is equal to			
00	(1) Zero (2) V/L	(3) V/C	(4) V.L/C	
	A dc series motor when connected across an AC supply will			
90	(1) Develop torque in same direction	(2) Not develop any to	orque	
00	(3) Draw dangerously high current	(4) Develop a pulsatin	g torque	
91	Typical value of SCR for modern turbo alternator is			
01	(1) 1 (2) 1.2	(3) 0.5	(4) 1.5	
	A 3-phase, 2 pole, 11 kV, 10000 kVA alternator has ea	arthed neutral through a	resistance of $7.0\Omega$ . The machine	
	has current balance protection which operates if out of	of balance current exce	eds 20% of full load. Determine	
92	%age of winding protected against earth fault			
	(1) 10.6% (2) 11.6%	(3) 10.9%	(4) 11.2%	
93	The value of group diversity factor is any generating sta	ation is		
	(1) Less than 1 (2) Equal to 1	(3) Greater than 1	(4) None of the above	
	A delta connected 400 V, 50 Hz, 3-phase induction mo	otor when started direct-	on-line takes a starting current of	
94	30 A. When the motor is started through a star-delta sta	rts, the starting current v	vill be	
	(1) 3A (2) 10 A	(3) 15 A	(4) 30 A	
95	The phenomenon of squirrel cage motors sometimes sh	owing tendency to run a	t very low speed is known as	
	(1) Cogging (2) Crawling	(3) Damping	(4) Skewing	
	A dynamometer type wattmeter with its voltage coil co	onnected across the load	side of instrument reads 250 W.	
96	If the load voltage be 200 V, what power is being taken	by load? The voltage co	bil has resistance of 2000 $\Omega$ .	
	(1) 200 W (2) 215W	(3) 230 W	/(4) 245 W	
	To limit the short circuit current during fault conditions	:		
97	(1) Reactors are used		(2) Capacitors are used	
	(3) A coil of high inductive reactance as compared to it	s resistance is used	(4) Both (a) and (c)	
	To enable dc series motor work satisfactory with an AC	c supply, the following n	nodifications should be done	
98	(1) The yoke and poles should be completely laminated	(2) The poles shoul	d be made of laminated steel	
	(3) The air gap between stator and rotor be reduced	(4) Compensating p	poles should be introduced	
	Hysteresis and eddy current loss are used in			
99	(1) Induction heating of steel	(2) Dielectric heating		
ļ	(3) Induction heating of brass	(4) Resistance heating		
100	An A.C current is given by i=100sin100. It will achieve	e a value of 50 A after		
	(1) $1/600 \sec$ (2) $1/300 \sec$	(3) 1/1800 sec	(4) 1/900 sec	

# ROUGH WORK

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