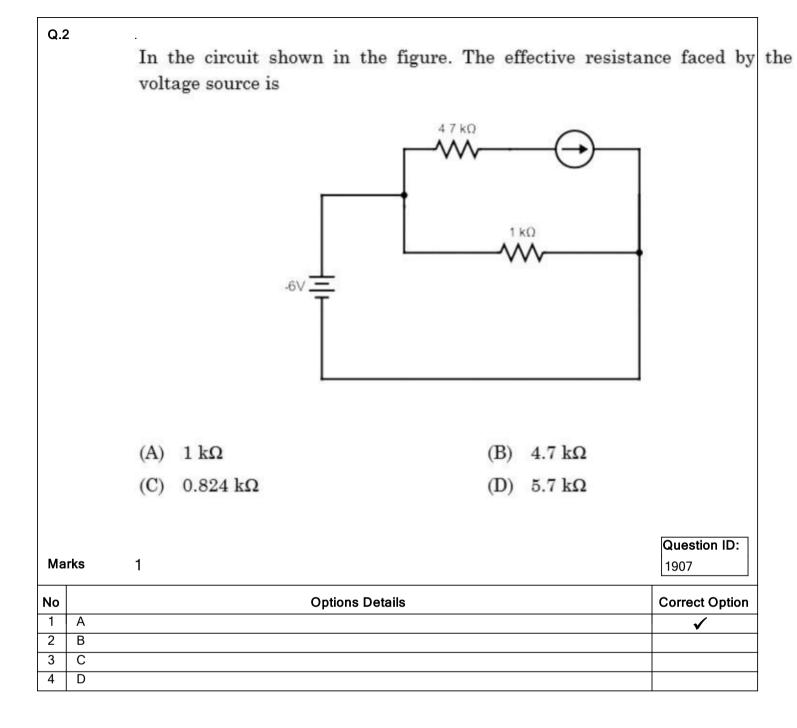
Total Question       : 100         Description       : Important Examination Instructions         1       Each question will carry 1 (One) Mark for correct answer.         2       There will be a legative marking of 0.25 (one-fourth) marks for wrong answer         3       Do not use the alt-tab, mouse or any other application while attempting the examination. Doing so may result in discontinuation of examination and your examination will be considered as null and void Attempting to close the browser repeatedly will lock the exam.         How to use the system:       1       How to start the test: You can start the test by clicking the Declaration Check box and then 1 am ready to begin button *.         8       How to answer a question: For the move to the next question you have to click on the "Save And Next button the same as for move to the back, click on the "Previous" button.         9       How to answer a question: You can select any answer by clicking on the button tigglayed just before the answers, You have to finally click the button - Save and Next - to save your answer and move to the next question. In Exam Sections, the Red Circle corresponding to this question. Ims Green. You can go to any section / any question number by clicking the relevant control.         9       How to answer a question for review: fyou want to review any question later, you have to click the "Review" "checkbox. This answer will be marked for review.         9       How to start the question.       - Correct Option one popup window display asking for "Are you sure, you want to Submit your test ?" You have to clock the "Review" Checkbox. This answer will be mar	Exa	am Name	: APGCL_Junior Manager_Electrical	
Important Examination Instructions         1. Each question will carry 1 (One) Mark for correct answer.         2. There will be a negative marking of 0.25 (one-fourth) marks for wong answer         3. Do not use the alt-tab, mouse or any other device to shift from examination screen to any other screen or do not try to open any other application while attempting the examination. Doing so may result in discontinuation of examination and your examination will be considered as null and void Attempting to close the browser repeatedly will lock the exam.         How to use the system:         1. How to use the system:       1. How to tast the test: You can start the test by clicking the Declaration Check box and then 'a merady to begin button'.         2. How to change the question: For the move to the next question you have to click on the 'Save And Next' button the same as for move to the back, click on the 'Frevious' button.         3. How to change the question: You can select any answer by clicking on the button displayed just before the answers. You have to finally click the button - Save and Next - to save your answer and move to the next question 'nay question number by clicking the relevant control.         4. How to safe the question for review: If you want to review any question later, you have to click the "Review" checkbox. This answer will be marked for review.         6. How to control to mark a question for review: If you want to review any question later, you have to click to mYES' to submit your test.         9. Circle correct By clicking the relevant control.         9. How to marker a question for review: If you want to review any question later, you have to click	Tot	al Question:	<b>s</b> : 100	
<ul> <li>2. There will be a negative marking of 0.25 (one-fourth) marks for wrong answer</li> <li>3. Do not use the alt-tab, mouse or any other device to shift from examination screen to any other screen or do not try to open any other application while attempting the examination. Doing so may result in discontinuation of examination and your examination will be considered as null and void Attempting to close the browser repeatedly will lock the exam.</li> <li>How to use the system:         <ol> <li>How to use the system:</li> <li>How to use the system:</li> <li>How to change the question: For the move to the next question you have to click on the "Save And Next" button the same as for move to the back, click on the "Yerevious" button.</li> <li>How to hange the question: For the move to the hext, click on the "Save And Next" button the same as for move to the back, click on the "Yerevious" button.</li> <li>How to hange the question: For the move to the hext, click on the "Save And Next" button the same as for move to the back, click on the "Yerevious" button.</li> <li>How to hanswer a question: You can select any answer by clicking on the button displayed just before the answers. You have to Ginally click the button - Save and Next - to save your answer and move to the next question. In Exam Sections, the Red Circle corresponding to this question turns Green. You can go to any section / any question number by clicking the relevant control.</li> <li>How to bash the question for review: If you want to eview any question later, you have to click on "YES" to submit your test.</li> <li>How to bash the guestion.</li> <li>Wat to bash sking for "Are you sure, you want to Submit your test ?" You have to click on "YES" to submit your test.</li> <li>Clice symbolis displayed at the bottom of the screen:</li></ol></li></ul>	Des	scription	: Important Examination Instructions	
9.1. How to start the test: You can start the test by clicking the Declaration Check box and then 1 am ready to begin button '.         1. How to change the question: For the move to the next question you have to click on the 'Save And Next' button the same as for move to the back, click on the 'Previous' button.         3. How to answer a question: You can select any answer by clicking on the button displayed just before the answers. You have to finally click the button - Save and Next - to save your answer and move to the next question. In Exam Sections, the Red Circle corresponding to this question turns Green. You can go to any section / any question number by clicking the relevant control.         4. How to skip the question: You can click the "Next Question" control to move on the next question number by clicking the relevant control.         5. How to mark a question for review: If you want to review any question later, you have to click the "Review" duestion and Submit Test button one popup window display asking for "Are you sure, you want to Submit your test ?" You have to click on "PES" to submit your test.         6. Circle symbols displayed at the bottom of the screen:         - Red Color: Unattempted Question.         - White Color: Unattempted and Reviewed Question.         - White Color: Unattempted and Reviewed Question         Question ID:         106         Marks       1         1       Options Details         Circet Option         1       33 watts         2       67 watts         3       100 watts </th <th></th> <th></th> <th><ol> <li>There will be a negative marking of 0.25 (one-fourth) marks for wrong 3. Do not use the alt-tab, mouse or any other device to shift from examination of examination of examination will be considered as null and void. Attempting to close</li> </ol></th> <th>ation screen to npting and</th>			<ol> <li>There will be a negative marking of 0.25 (one-fourth) marks for wrong 3. Do not use the alt-tab, mouse or any other device to shift from examination of examination of examination will be considered as null and void. Attempting to close</li> </ol>	ation screen to npting and
All of the same and set of the same as for move to the next question you have to click on the 'Save And Next' button the same as for move to the back, click on the 'Previous' button.         3. How to answer a question: You can select any answer by clicking on the button displayed just before the answers. You have to finally click the button - Save and Next - to save your answer at question turns Green. You can go to any section / any question number by clicking the relevant control.         4. How to skip the question: You can click the "Next Question control to move on the next question to skip the question.''You can click the "Next Question '' any question number by clicking the relevant control.         4. How to skip the question: You can click the "Next Question is control to move on the next question or by click the "Next Question '' any question to skip the question'' for eview: If you want to review any question later, you have to click the "Review" checkbox. This answer will be marked for review.         6. How to Submit your test: By clicking On last question and Submit Test button one popup window display asking for ''Are you sure, you want to Submit your test?" You have to click the "Next Question.         9. Circle symbols displayed at the bottom of the screen:       -Red Color: Current Question.         9. How to bulbs marked 200 watt-250 volts and 100 watt-250 volts are joined in series and the combination is connected to 250 volts mains supply. The power consumed in the circuit would be         Marks       1         1       33 watts         2       67 watts         3       100 watts			How to use the system:	
Q.1       Two bulbs marked 200 watt-250 volts and 100 watt-250 volts are joined in series and the combination is connected to 250 volts mains supply. The power consumed in the circuit would be         Marks       1         Mo       Options Details         1       33 watts         2       67 watts         3       100 watts			<ul> <li>then 'I am ready to begin button '.</li> <li>How to change the question: For the move to the next question you had on the 'Save And Next' button the same as for move to the back, click or 'Previous' button.</li> <li>How to answer a question: You can select any answer by clicking on the displayed just before the answers. You have to finally click the button - to save your answer and move to the next question. In Exam Section Circle corresponding to this question turns Green. You can go to any s question number by clicking the relevant control.</li> <li>How to skip the question: You can click the "Next Question" control to next question</li> <li>How to mark a question for review: If you want to review any question to click the "Review" checkbox. This answer will be marked for review.</li> <li>How to Submit your test: By clicking On last question and Submit Test popup window display asking for "Are you sure, you want to Submit yo have to click on "YES" to submit your test.</li> <li>Circle symbols displayed at the bottom of the screen: -Red Color: Current QuestionGreen Color: Attempted QuestionWhite Color: Attempted QuestionBlue Color: Attempted and Reviewed Question.</li> </ul>	ve to click on the Save and Next is, the Red ection / any move on the later, you have t button one
Marks1NoOptions DetailsCorrect Option133 watts	Q.1		wo bulbs marked 200 watt-250 volts and 100 watt-250 volts are joined in series and	the combination
1     33 watts       2     67 watts       3     100 watts	Ma	rks 1		
2     67 watts       3     100 watts			Options Details	Correct Option
3 100 watts				
				<b>✓</b>
	4	300 watts		



Three 3-ohm resistors are conbetween any two of the corner (A) $\frac{3}{4}\Omega$ (C) $2\Omega$		Vhat is the r
	(B) <u>3Ω</u>	
(C) 20		
(0) 211	(D) 4 / 3Ω	
1		Question ID: 1908
Options Deta	ils	Correct Option
		✓
		•
		1 Options Details

✓

2

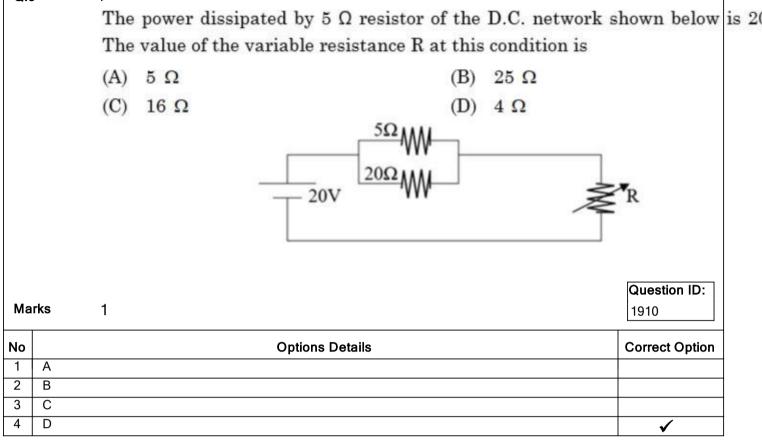
3

4

Mercury

Silver

Electrolytes



Q.6	Four heating coils are available for use in a heater. For a given line voltage, which of t connection will produce maximum heat?	he following
Ма	rks 1	Question ID: 1911
No	Options Details	Correct Option
1	all the four coils in parallel	✓
2	all four coils are connected in series	
3	two parallel pairs in series	
4	one pair in parallel with the other two in series	

Q.7		mar	ee currents $i_1$ , $i_2$ and $i_3$ meet a ked as entering the junction. I ill be			일부는 배가 같은 것을 가 같은 것을 것 같아. 것을 것 같아. 것을 것 같아.
		(A)	$5\sin(\omega t + 36.87^{\circ}) mA$	(B)	$4\cos(\alpha t + 36.87)$	$m^{\circ}) mA$
		(C) $-5\sin(\omega t + 36.87^{\circ}) mA$	(D)	$-3\sin(\omega t + 36.$	.87°) mA	
Mai	rks	1				Question ID: 1912
No			Options Details			Correct Option
1	А					
2	В					
3	С					
4	D					
5		n questio will be av	n / Answer options. Grace varded.			$\checkmark$

Γ

When a certain resistor R is connected to a current source, it dissipates a pool of 18W. When the same resistor R is connected to a voltage source having s magnitude as the current source, the power dissipated by R is 2 W. Then magnitude of the current source and value of R are respectively

(A)	$\sqrt{6A}, 1\Omega$	(B) $3A, 3\Omega$
$(\mathbf{A})$	VOA, 112	$(\mathbf{D})$ $\mathbf{OA},$

(C)  $1A, 3\Omega$  (D)  $\sqrt{6A}, 3.0\Omega$ 

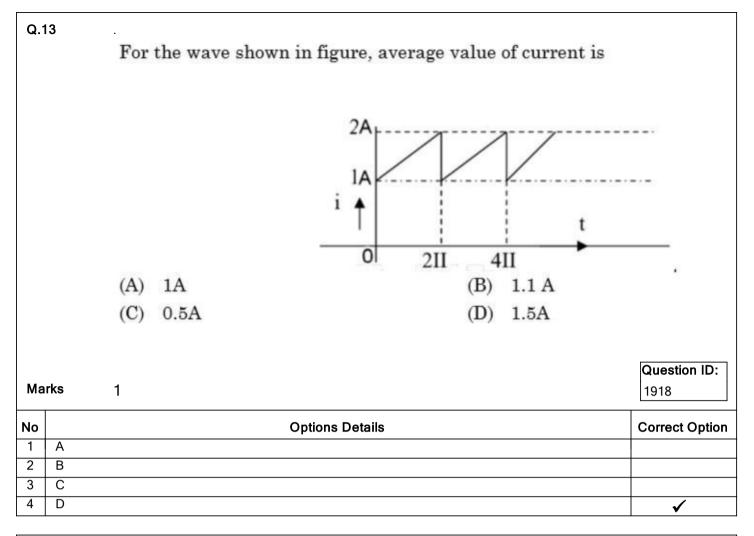
Ma	arks 1	Question ID: 1913
No	Options Details	Correct Option
1	A	
2	В	
3	C	
4	D	✓

Q.9		$E_{oa}, E_{ob}$ and $E_{oc}$ are three phase voltages while $E_{ab}, E_{bc}$ , and $E_{ca}$ are the voltage of a balanced three-phase system having abc phase sequence. In relate $E_{ob}, E_{bc}$ would				
		(A) Lag by 30°				
		(B) Lead by 30°				
		(C) Have the same phase				
		(D) Have no definite phase relationship				
Ma No	rks	1 Options Details	Question ID: 1914 Correct Option			
1	А		$\checkmark$			
2	B C					
4	D					
Q.1	10	A 10 mH inductor carries a sinusoidal current of 1 A r.m.s. at a frequent dissipated by the inductor is	cy of 50Hz. The average power			
Ma	rks	1	Question ID: 1915			

No	Options Details	Correct Option
1	0 W	$\checkmark$
2	0.25 W	
3	0.5 W	
4	1.0 W	

		source possess equal react	ance. The angular frequency	of the AC source
		(A) 10 <sup>4</sup>	(B) 100	
		(C) 10	(D) 200 π	
Marks		1		Question ID: 1916
No		Options	Details	Correct Option
	А			✓
	B			
-	C D			
Q.12		Which statement about the inductance	e is incorrect?	I

Ма	rks 1	Question ID: 1917
No	Options Details	Correct Option
1	The inductance of a coil can be increased by adding few more turns to the coil	
2	The inductive reactance varies directly as the frequency of the applied voltage	
3	Inductive reactance can be measured by an ohmmeter	✓
4	An inductance does not oppose direct currents	



Q.1	4 For the same peak value of voltage, which wave form will have the least RMS value?	
Ма	rks 1	Question ID: 1919
No	Options Details	Correct Option
1	sine wave	
2	rectangular	
3	triangular	✓
4	full wave rectified sine wave	

Q.1	15	(100	series R-L-C circuit has $(0 + j0) \Omega$ at its resonance stance and inductance of the stance of the s	e angular freq	uency of 10 <sup>7</sup> r	•
		(A)		(B)	10 Ω, 10mH	
		(C)	100 Ω, 10mH	(D)	10 Ω, 1mH	
Ма	rks	1				Question ID: 1920
No			Options Deta	ils		Correct Option
1	А					$\checkmark$
2	B					
3	C D					
Q.1	16	How	can a Milli-ammeter be used as a voltr	meter?		
Ма	rks	1				Question ID: 1921
No			Options Deta	ils		Correct Option
1		necting a	a low resistance in parallel			
2	By con	necting	a high resistance in parallel			
3		e instrum necting a	a low resistance in series with			
4	the inst		a high resistance in series with			
-		rument				•
Q.1	17		h of the following instruments indicate ured at the time at which it is being m		alue of the electrical o	quantity being
Ма	rks	1				Question ID: 1922
No			Options Deta	ils		Correct Option
1		te instru				
2		ng instru				$\checkmark$
3		ing instr				
4	integra	ung mst	ruments			

Q.1	8 The disc of an instrument using eddy current damping should be of	
Ма	rks 1	Question ID: 1923
No	Options Details	Correct Option
1	conducting and magnetic material	
2	non-conducting and magnetic material	
3	conducting and non-magnetic material	✓
4	non-conducting and non-magnetic material i.e. insulating material	

Q.19		0	· · · · · · · · · · · · · · · · · · ·	1		
		Con	sider the following me	tals:		
		1.	Zinc.			
			Gold.			
			Silver.			
			Copper.			
		The	correct sequence of the	e increasing order	of their resist	ivities is
		(A)	4, 3, 1, 2	(B)	3, 4, 2, 1,	
		(C)	4, 3, 2, 1	(D)	3, 4, 1, 2	
Mar	ks	1				Question ID: 1924
	ks	1	Options	Details		
<b>No</b>	A	1	Options	Details		1924
No		1	Options	Details		1924

Q.2	20 Which of the following is piezoelectric material?	
Ma	irks 1	Question ID: 1925
		1925
No	Options Details	Correct Option
1	Quartz	✓
2	Silica sand	
3	Corundum	
4	Polystyrene	

Q.2	1 In a 3-phase induction motor, the number of slots of stator is not kept an exact multipl of rotor slots because	e of the number
Ма	rks 1	Question ID: 1926
		1920
No	Options Details	Correct Option
1	it facilitates cooling	
2	avoids magnetic locking between stator and	✓
	rotor	
3	improves efficiency	
4	Improves pf	

Q.2	22 Slip rings for induction motors are usually made of	
Ма	rks 1	Question ID: 1927
No	Options Details	Correct Option
1	aluminum	
2	copper	
3	phosphor bronze	✓
4	carbon	

Q.2	23 In a double cage induction motor, outer cage used for starting has	
Ma	rks 1	Question ID: 1928
No	Options Details	Correct Option
1	high Resistance and low Reactance	✓
2	high Reactance and low Resistance	
3	high Reactance and high Resistance	
4	low Resistance and high Reactance	

z	<b>24</b> .					
			resultant flux developed by stator of a maximum flux due to one phase	a 3-	phase induction	on motor is —
	(	(A)	equal to (E	3)	1.5 times	
		(C)		D)	3 times	
				/		
Ма	<b>rks</b> 1	1				Question ID: 1929
No			Options Details			Correct Option
1	А					
2	В					✓
3	C D					
4	D					
Ма	I	n torq	ue ?			Question ID:
	rks 1	1				1930
No	rks 1	1	Options Details			
<b>No</b>	Separately	y excit	-			1930
<b>No</b> 1 2	Separately Series mot	y excit tor	-			1930
<b>No</b> 1 2 3	Separately Series mot	y excit tor :or	red motor			1930 Correct Option
<b>No</b> 1 2	Separately Series mot	y excit tor :or	red motor			1930 Correct Option
<b>No</b> 1 2 3	Separately Series mot Shunt mot Compound	y excit tor or d moto	red motor	hern	nal, nuclear and hyd	1930 Correct Option ✓
No 1 2 3 4	Separately Series mot Shunt mot Compound 26 T	y excit tor or d moto The m would	ost appropriate speeds in rpm of generators used in th	hern	nal, nuclear and hyd	1930 Correct Option ✓
No 1 2 3 4 Q.2	Separately Series mot Shunt mot Compound 26 T	y excit tor or d moto The m would	ost appropriate speeds in rpm of generators used in th	hern	nal, nuclear and hyd	1930         Correct Option         ✓         Image: state
No 1 2 3 4 Q.2 Ma	Separately Series mot Shunt mot Compound 26 T	y excit tor or d moto The m would	or ost appropriate speeds in rpm of generators used in the respectively be Options Details	hern	nal, nuclear and hyd	1930         Correct Option         ✓         Iro-power plants         Question ID:         1931

4

1500, 1500 and 3000 1000, 900 and 750

Q.2	7 In a synchronous generator operating at zero power factor lagging, the effect of arma	ature reaction is
		Question ID:
Ма	rks 1	Question ID: 1932
No	Options Details	Correct Option
1	magnetizing	
2	demagnetizing	✓
3	cross-magnetizing	
4	both magnetizing and cross-magnetizing	

Q.2	28	A DC shunt generator is supplying a load of 15 kW at 200V. The armature and shunt are 0.1 $\Omega$ and 100 $\Omega$ respectively. The induced e.m.f of the generator is	field resistances
Ma	rks	1	Question ID: 1933
No		Options Details	Correct Option
1	192.3 V		
2	207.7 V		✓
3	210 V		
4	187 V		

)

In a Scott connected-transformer the number of main and teaser to respectively are

(A)  $N, (2/\sqrt{3})N$  (B) N/2, N(C)  $\sqrt{3} N/2, N$  (D)  $N, \sqrt{3}N/2$ 

Marks 1		Question ID: 1934
No	Options Details	Correct Option
1	A	
2	В	
3	C	
4	D	$\checkmark$

Q.30		For doubling the torque developed by a D.C. Series motor, its armature current has to	be increased by
Ма	rks	1	Question ID: 1935
No		Options Details	Correct Option
1	100%		
2	200%		
3	50%		
4	41.40%		$\checkmark$

Q.31	Swinburne's test cannot be performed on	
Marks	1	Question ID: 1936
No	Options Details	Correct Option
1 S	hunt motor	
2 S	eries motor	✓
3 L	ong shunt compound motor	
4 S	hort shunt compound motor	

A 3-phase, 400 V, star-connected alternator has a synchronous impedance (0+j20) ohms per phase. If it delivers a balanced load of 12 kVA at zero per factor leading, then the percentage voltage regulation of the alternator is equipart.

(A) –5	(B)	+50
--------	-----	-----

(C) -150 (I	D) 1	150
-------------	------	-----

Marks 1 1937		Question ID: 1937
No	Options Details	Correct Option
1	A	
2	В	
3	C	$\checkmark$
4	D	

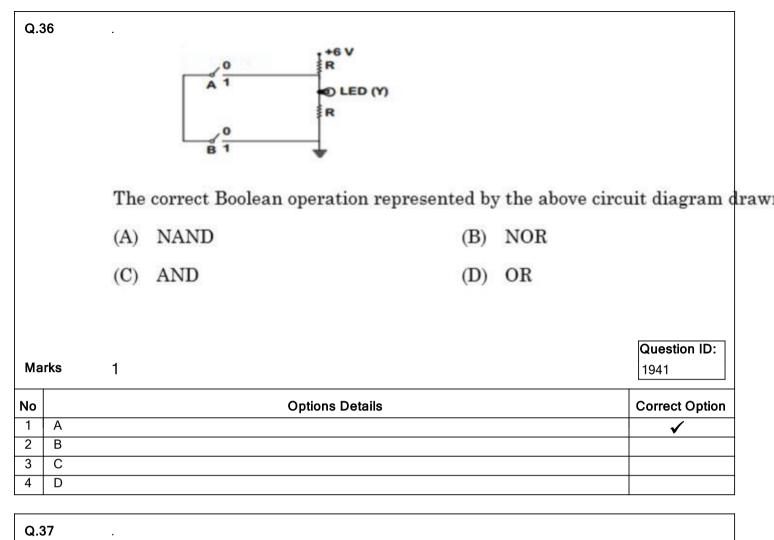
Q.3	<b>3</b> A 3-phase synchronous generator is operating at constant load while the excitation is unity power factor of current. If the excitation is now increased, the power factor will	s adjusted to give
Ma	rks 1	Question ID: 1938
No	Options Details	Correct Option
1	become leading	
2	become lagging	$\checkmark$
3	remain at unity	
4	become zero	

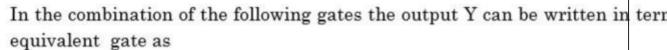
A star-connected synchronous generator has synchronous impedance  $(0+j5.0) \Omega$ . It delivers a zero-pf leading current of 20 A at 400 V. Its excitation emf is

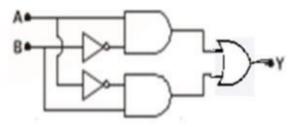
- (A)  $400 + j\sqrt{3} \times 100$  (B)  $400 j\sqrt{3} \times 100$
- (C)  $400 \sqrt{3} \times 100$  (D)  $400 + \sqrt{3} \times 100$

Ма	rks 1	Question ID: 1939
No	Options Details	Correct Option
1	A	
2	В	
3	C	✓
4	D	

Q.3	85 Rotational losses in electrical machines consists of	
Ма	ırks 1	Question ID: 1940
No	Options Details	Correct Option
1	friction and windage losses	
2	stator core, friction and windage losses	
3	rotor core, friction and windage losses	✓
4	stray load losses and friction and windage losses	







(B) OR GATE

(C) EX-OR GATE

(A) AND GATE

(D) EX-NOR GATE

Ма	arks 1	Question ID: 1942
No	Options Details	Correct Option
1	A	
2	В	
3	C	✓
4	D	

Q.:	38	The Output Y in the circuit below is always '1' when?	
		(A) two or more of the inputs P,Q,R are '0'	
		(B) two or more of the inputs P,Q,R are '1'	
		(C) any odd number of the inputs P,Q,R is '0'	
		(D) any one of the inputs P,Q,R is '1' and remaining input	its are '0'
Ма	arks	1	Question ID: 1943
No		Options Details	Correct Option
1	A		
2	B C		<b>√</b>
4	D		
Q.:	39	The number of NAND gates required realizing Exclusive NOR gating?	
Ma	arks	1	Question ID: 1944

No	Options Details	Correct Option
1	4	
2	5	$\checkmark$
3	6	
4	7	

Q.4	If the firing angle of an SCR circuit is increased, the output voltage will	
Ма	rks 1	Question ID: 1945
No	Options Details	Correct Option
1	Be increased	
2	Be decreased	✓
3	Remain same	
4	Become maximum	

Q.4	41	Voltage safety factor of a thyristor lies between	
Ма	rks	1	Question ID: 1946
No		Options Details	<b>Correct Option</b>
1	1.0 and <sup>-</sup>	.5	
2	1.5 and 2	2.0	
3	2.0 and 2	2.5	✓
4	2.5 and 3	3.0	

Q.42		The difference between ASCII codes for the uppercase letters and the corresponding letters is	lower case
Ма	rks	1	Question ID: 1947
No		Options Details	Correct Option
1	0		
2	16		
3	32		$\checkmark$
4	64		
Q.43		Actual instructions in flowcharts are represented in	

Marks 1			
No		Options Details	Correct Option
1	Boxes		$\checkmark$
2	Circles		
3	Lines		
4	Arrows		

Q.4	44				
		The height, h, at which a placed over the floor in o given distance, L, from its	rder that the inten	sity of horiz	and the second
		(A) $h = \sqrt{2} L$	(B)	$h = \frac{L}{\sqrt{2}}$ $h = \frac{L}{2}$	
		(C) $h = L$	(D)	$h = \frac{L}{2}$	
Ма	ırks	1			Question ID: 1949
No		Options	Details		Correct Option
1	A				
2	В				$\checkmark$
3	С				
4	D				

Г

Q.45		Mat	ch the following Column I	Column II	
		4	Column I	Column II	
			(a) Luminous flux	(i) Candela	
			(b) Luminous intensity	(ii) Candle power $\times$ Solid angle	
			(c) Lumen	(iii) lux	
			(d) Illumination	(iv) Lumens	
		(A)	a-(i), b-(ii), c-(iii),d-(iv)		
		(B)	a-(iv), b-(i), c-(ii), d-(iii)		
		(C)	a-(i), b-(iv), c-(ii), d-(iii)		
		(D)	a- (iv), b-(iii), c- (i), d-(ii)		
				Question ID:	: ]
Ma	arks	1		1950	
No			Options Detai	Is Correct Optic	on
1	A				
2	B C			<b>√</b>	
4	D				
Q.46		The ty	pe of welding used for pressure tight	joint is	

Ма	rks 1	Question ID: 1951
No	Options Details	Correct Option
1	Spot welding	
2	Seam welding	✓
3	Protection welding	
4	Butt welding	

Q.4	7 The value of slip of induction motor during regenerative braking is	
Ма	rks 1	Question ID: 1952
Na		
No	Options Details	Correct Option
1 1	S >1	Correct Option
1 2	-	Correct Option
1	S >1	Correct Option
1	\$>1 \$	Correct Option

A hydroelectric station has a catchment area of  $5 \times 10^8$  m<sup>2</sup>. The average rai per annum in this area is 135 cm. assuming that 20% of the rainfall is lost do evaporation etc, the rate of availability of water is

(A)	$15.18 \text{ m}^{3/s}$	(B)	$17.12 \text{ m}^{3/s}$
(C)	11.1 m <sup>3</sup> /s	(D)	$17.6 \text{ m}^{3/s}$

QuestionMarks11953		
No	Options Details	Correct Option
1	A	
2	В	✓
3	C	
4	D	

#### Q.49

The nominal T circuit of transmission line has  $R = 10 \Omega$ ,  $X = 20 \Omega$  $Y = 400 \mu \mho$  for each phase. The generalized constant 'A' of the line is

(B)  $1.25 \angle 0.5^{\circ}$ 

(D) 0.996 ∠ 1.15°

(C)  $2.8 \angle 1.2^{\circ}$ 

(A) 0.562 ∠ 1.5°

QuestioMarks11954		
No	Options Details	Correct Option
1	A	
2	В	
3	C	
4	D	$\checkmark$

Q.50		In the case of hardening of a steel pulley, the depth of penetration 1.5 mm. The relative permeability is unity and the specific resistivity $5 \times 10^{-7} \Omega$ m. Determine the frequency.			
		(A) 56290 Hz	(B) 28145 Hz		
		(C) 50000 Hz	(D) 32466 Hz		
Ма	ırks	1		Question ID: 1955	
No		Options D	etails	Correct Option	
1	A			✓	
2	B C				
4	D				
Q.!	51	capacity $5 \times 10^{6}$ m <sup>3</sup> . The eff turbine and generation efficiency	ion has a reservoir of area 2. fective head of water is 100 ciencies are respectively 95%, e generated from the power st	) metres. The pe , 90% and 85%. Th	
		(A) 9,89,175 kWh	(B) 7,80,175 k <sup>1</sup>	Wh	
		(C) 6,09,102 kWh	(D) 4,80,101 k <sup>1</sup>	Wh	
Ma	ırks	1		Question ID: 1956	
No		Options D	etails	Correct Option	
1 2	A B			<b>√</b>	
3	C				
4	D				
Q.!	52	Transmission efficiency of transmission	line increases with the		
Ma	ırks	1		Question ID: 1957	
No		Options D	etails	Correct Option	
1		ease in power factor and voltage			
2		ases in power factor and voltage ase in power factor and decrease in		✓	
	voltag	ge			
4	Incre	ase in the voltage but decrease in the			
	powe	er factor			

Q.5	Which of the following parameters is not a primary parameter?	Which of the following parameters is not a primary parameter?		
Ма	rks 1	Question ID: 1958		
		1956		
No	Options Details	Correct Option		
1	Resistance			
2	Attenuation constant	✓		
3	Capacitance			
4	Conductance			

Q.5	Q.54 Which of the following conductor is needed to use with shortest span?	
Ма	rks 1	Question ID: 1959
No	Options Details	Correct Option
1	ACSR Conductors	
2	All Aluminium Conductors	✓
3	Hard Drawn Copper Conductors	
4	Cadmium Copper Conductors	

<b>Q.55</b> A single phase overhead transmission line delivers 1100 kW at 33 kV at 0.8 power factor I total resistance and inductive reactance of the line are 10 $\Omega$ and 15 $\Omega$ respectively. The transficiency is			
Ма	ırks	1	Question ID: 1960
No		Options Details	Correct Option
1	88.54%		
2	95.24%		
3	92.88%		
4	98.44%		✓

Q.56	A 3-phase overhead transmof an equilateral triangle			-
conductor per km. Given that diameter of each			1.25 cm.	
	(A) 1.96 $\mu$ F	(B) (	$0.0498 \ \mu F$	
	(C) 0.425 $\mu$ F	(D) (	$0.0096 \ \mu F$	
Marks	1			Question ID: 1961
	•			1901
No	Options	Details		Correct Option
1 A				
2 B				
3 C 4 D				
				-
Q.57	A symmetrical fault occurs on a power kVA is 25%. If the full load current cor	r system. The percentage re responding to base kVA is 2	actance of the sys 0A, then short circ	stem on 2500 base
Q.57 Marks	A symmetrical fault occurs on a power kVA is 25%. If the full load current cor	r system. The percentage re responding to base kVA is 2	actance of the sys 0A, then short circ	tem on 2500 base cuit current is <b>Question ID:</b> 1962
Marks	kVA is 25%. If the full load current cor	responding to base kVA is 2	actance of the sys 0A, then short circ	Question ID: 1962
Marks	kVA is 25%. If the full load current cor	responding to base kVA is 2	actance of the sys 0A, then short circ	Question ID: 1962
Marks No 1 80 A 2 40 A	kVA is 25%. If the full load current cor	responding to base kVA is 2	actance of the sys 0A, then short circ	Question ID: 1962 Correct Option
Marks No 1 80 A 2 40 A 3 160 A	kVA is 25%. If the full load current cor	responding to base kVA is 2	actance of the sys 0A, then short circ	Question ID: 1962 Correct Option
Marks No 1 80 A 2 40 A	kVA is 25%. If the full load current cor	responding to base kVA is 2	actance of the sys 0A, then short circ	Question ID: 1962 Correct Option
Marks No 1 80 A 2 40 A 3 160 A	kVA is 25%. If the full load current cor	Details as a radius of 0.8mm. The w	0A, then short circ	Question ID: 1962 Correct Option ✓
Marks No 1 80 A 2 40 A 3 160 A 4 20 A	kVA is 25%. If the full load current cor 1 Options A fuse wire of circular cross-section h	Details as a radius of 0.8mm. The w	0A, then short circ	Question ID: 1962 Correct Option ✓

Г

	Marks 1		1963
N	10	Options Details	Correct Option
	1 0.64 mm		
	2 1 mm		
	3 0.1 mm		
-	4 0.2 mm		✓

Q.5	59				
	The insulation resistance of a single-core cable is 495 M $\Omega$ diameter is 2.5 cm and resistivity of insulation is 4.5 × 10 <sup>14</sup> thickness is		Contraction of the second second second second		
		(A) 3 cm	(B)	$5.2~{ m cm}$	
		(C) 4 cm	(D)	1.25 cm	
Ма	rks	1			Question ID: 1964
No		Options D	Details		Correct Option
1	A				
2 3	B C				
4	D				✓
Q.6	60	The minimum oil circuit breaker has les	s volume of oil because		
Ma	rks	1			Question ID: 1965
No		Options D	Details		Correct Option
1	Ther	e is insulation between contacts			

1	There is insulation between contacts	
2	The oil between the breaker contacts has greater strength	
3	Solid insulation is provided for insulating the contacts from earth	✓
4	Both (A) & (B)	

Q.6	51 ——— is to tree as melon is to		
Ма	rks 1		Question ID: 1966
No	(	Options Details	Correct Option
1	Bush, Ripe		
2	Elm, Water		
3	Gnarled, Sweet		
4	Apple, Vine		✓

Q.6	62 ——— is to wide as thin is to ———	
Ма	arks 1	Question ID: 1967
No	Options Details	Correct Option
1	Narrow, Fat	✓
2	Store, Weight	
3	Nothing, Present	
4	Man, Street	

Q.6	63 ——— is to sentence as sentence is to ———	
Ма	ırks 1	Question ID: 1968
No	Options Details	Correct Option
1	Letters, Question	
2	Length, Full stop	
3	Word, Paragraph	✓
4	Phrase, Content	

Q.6	54 ——— is to masculine as women is to ———	
Ма	rks 1	Question ID: 1969
No	Options Details	Correct Option
1	Disguise, Deductive	
2	Man, Feminine	$\checkmark$
3	Virile, Intuitive	
4	Malicious, Intuitive	

Q.6	65 is to top as base is to	-	
Ма	ırks 1		Question ID: 1970
No	Optio	ns Details	Correct Option
1	Side, Bottom		✓
2	Ibex, Ball		
3	Spin, Bottom		
4	Apex, Home		

Q.6	6	Hope is to future as regret is ———	
Ма	rks	1	Question ID: 1971
No		Options Details	Correct Option
1	Opportu	ınity	
2	Absent		
3	Forecos	st	
4	Past		✓

Q.67		Square is to diamond as a circle to ———	
Ма	rks	1	Question ID: 1972
No		Options Details	Correct Option
1	Cube		
2	Oval		
3	Round		$\checkmark$
4	Triangle		

Q.6	Safe is to danger as alone is	
Ма	rks 1	Question ID: 1973
No	Options Details	Correct Option
1	Норе	✓
2	Company	
3	Enemy	
4	Desert	

Q.6	39	A chain is to gear, as a pulley is to	
Ма	ırks	1	Question ID: 1974
No		Options Details	Correct Option
1	Belt		
2	Friction		✓
3	Speed		
4	Motion		

Q.7	20 Loud is to sound, as the bright is to	
Ма	rks 1	Question ID: 1975
No	Options Details	Correct Option
1	Lamp	$\checkmark$
2	Lightning	
3	Sun	
4	Light	

Q.71		Sand is to concrete as carbon is to	
Ма	rks	1	Question ID: 1976
No		Options Details	Correct Option
1	Brass		
2	Bronze		
3	Steel		✓
4	Plastic		

Q.7	72	Bank is to river as coast is to	
Ма	irks	1	Question ID: 1977
No		Options Details	Correct Option
1	Beach		
2	Sea		$\checkmark$
3	Tide		
4	Sledge		

Q.7	73	Cement is to building as designer is to	
Ма	rks	1	Question ID: 1978
No		Options Details	Correct Option
1	Elevator		
2	Artist		
3	Architect		
4	Modesty		✓

Q.74		Gears are to cars as runners are to	
Ма	ırks	1	Question ID: 1979
No		Options Details	Correct Option
1	Sled		
2	Race		
3	Streets		
4	Tracks		$\checkmark$

Q.75		Prison is to cell as hospital is to	
Ма	rks	1	Question ID: 1980
No		Options Details	Correct Option
1	Doctor		✓
2	Nurse		
3	Ward		
4	Patient		

Q.7	76 —— is to train as tool is to peal	
Ма	arks 1	Question ID: 1981
No	Options Details	Correct Option
1	Passenger	
2	Bridge	
3	Engine	
4	Track	✓

Q.7	77	Gold is jewelry as foot is to	
Ма	ırks	1	Question ID: 1982
No		Options Details	Correct Option
1	Body		
2	Distance		
3	Yard		✓
4	Weight		

Q.78		Sun is to shadow as capital is to	
			Question ID:
Ma	rks	1	1983
No		Options Details	Correct Option
1	Merit		
2	Credit		
3	Balance		✓
4	Substan	ce	

Q.7	79	Rein is to horse as hockey is to	
			Question ID:
Ma	rks	1	1984
No		Options Details	Correct Option
1	Goal		
2	Stick		✓
3	Puck		
4	Play		

Q.8	30	Question is to answer as ask is to	
Ма	rks	1	Question ID: 1985
No		Options Details	Correct Option
1	Know		
2	Reply		
3	Pray		✓
4	Follow		

Q.8	Wimbledon 2020 women winner	
Ма	rks 1	Question ID: 1986
No	Options Details	Correct Option
1	Venus Williams	
2	Serena Williams	
3	Simona Halep	✓
4	Victoria Azarenka	

Q.8	32	Australian Open 2020 men winner	
Ма	rks	1	Question ID: 1987
No		Options Details	Correct Option
1	Djokovic		✓
2	Federer		
3	Silich		
4	Thiem		

Г

Г

Q.8	83 2021 T20 world cricket cup will be hosted by	
Ма	ırks 1	Question ID: 1988
No	Options Details	Correct Option
1	England	
2	Australia	
3	West Indies	
4	India	$\checkmark$

Q.8	ICC 2020 ODI cricket cup winner is	
Ма	rks 1	Question ID: 1989
No	Options Details	Correct Option
1	Australia	
2	England	✓
3	West Indies	
4	India	

Q.8	35 Uber Cup trophy belongs to	
Ма	ırks 1	Question ID: 1990
No	Options Details	Correct Option
1	Носкеу	
2	Badminton	$\checkmark$
3	Kabaddi	
4	Kho kho	

Q.8	86 Dhan Chand Trophy belongs to	
Ма	arks 1	Question ID: 1991
No	Options Details	Correct Option
1	Cricket	
2	Volley Ball	
3	Hockey	✓
4	Basket Ball	

Q.8	87	National game of Australia is	
Ма	arks	1	Question ID: 1992
No		Options Details	Correct Option
1	Hand Ba	all	
2	Rugby		
3	Tennis		
4	Cricket		✓

Q.8	38	National game of India is	
Ма	ırks	1	Question ID: 1993
No		Options Details	Correct Option
1	Kabaddi		
2	Cricket		
3	Kho kho		
4	Hockey		✓

Q.8	39	2016 Olympics were held in	
Ма	rks	1	Question ID: 1994
No		Options Details	Correct Option
1	Japan		
2	Greece		
3	Brazil		✓
4	USA		

Q.9	Who is the chief of ICC?	
Ма	rks 1	Question ID: 1995
No	Options Details	Correct Option
1	Allen Border	
2	Dave Richardson	✓
3	Aurthorton	
4	Kumble	

Complete the given sentence selecting the appropriate alternatives from given choices.

If he had studied harder, ——.

- (A) he will pass the examination
- (B) he would pass the examination
- (C) he would have passed the examination
- (D) he should pass the examination.

Ma	rks 1	Question ID: 1996
No	Options Details	Correct Option
1	A	
2	В	
3	C	$\checkmark$
4	D	

	with	ence below can be imp a more appropriate/c es to replace bold-faced	orrect string. Se	elect an alte	ernative from t		
	We h	We have lived in this house ever since my father has died.					
	(A)	had died	(B)	died			
	(C)	was died	(D)	is died			
					Question ID:		
Marks	1	Ontions	otaile		1997		
Marks No	1	Options D	etails				
No	1	Options D	etails		1997		
<b>No</b> 1 A	1	Options D	etails		1997 Correct Option		

Words in the question are arranged in random order. One of the four alternative below each random word order provides the correct order of words to for sentence. Select the alternative that provides the order for words to for sentence.

beyond he to never us live told means our

1 2 3 4 5 6 7 8 9 (A) 9 6 2 8 7 3 5 1 4 (B) 2 8 9 6 1 3 4 7 5 (C) 2 8 7 5 1 3 4 9 5 (D) 2 7 5 4 3 6 1 9 8

Question ID: Marks 1 1998 **Correct Option** No **Options Details** 1 Α 2 В 3 С 4 D  $\checkmark$ 

Read the sentence to find out whether there is any error in it. The error, if will be in one part of the sentence. The number of that part is the answer.

Several prominent persons (1)/ involved in the scandal (2)/ are required to app (3)/ to the investigation team(4).

- (A) 1
- (B) 2
- (C) 3
- (D) 4

Ма	irks 1		Question ID: 1999
No		Options Details	Correct Option
1	A		
2	В		
3	С		
4	D		✓

## Q.95

Select the word from the given options that best describes the same meaning as the g

# VERACITY

- (A) Truthfulness
- (B) Reliability
- (C) Tenacity
- (D) Wisdom

Ма	ks 1	Question ID: 2000
No	Options Details	Correct Option
1	A	$\checkmark$
2	В	
3	C	
4	D	

Q.94

Q.9	6					]
Q.9	rU		the word from the given options that best describes given word.	the	meaning	opp
		DREAL	RY			
		(A) D:	rab			
		(B) Be	eautiful			
		(C) Ba	right			
		(D) D	angerous			
Mar	rks	1		<b>Qu</b> 200	estion ID: )1	
No			Options Details	Cor	rect Option	
1	A			_		-
2	B C				✓	-
4	D				•	+
						1

Q.9	97					
		Sele	ct the option that	best describes the mea	ning of the gi	ven Idiom/ Phrase
		on ti	he cards			
		(A)	Certain	(B)	Due	
		(C)	Probable	(D)	Evident	
Ma	rks	1				Question ID: 2002
No			Ol	ptions Details		Correct Option
1	Α					$\checkmark$
2	В					
3	С					
4	D					

Q.98						
	5	Sele	ct the option that best describes t	he mea	ning of the giv	7en Idiom/ Phra
	1	Broi	wn study			
	(	(A)	Sleep			
	(	B)	Day dream			
	(	C)	Fear			
	(	D)	Rage			
Marks	is 1					Question ID: 2003
10			Options Details			Correct Option
	A B					
	C					<b>√</b>
5 1 1	•					
	D					
4 [	D	For	ct the correct alternative to fill up more than three decades now, vision programmes.			1025
	D 5 1 t	For elev	more than three decades now, vision programmes.		n villages ha	1025
4 [	D	For elev (A)	more than three decades now,	India (B)		10.05
4 [	D	For elev (A)	more than three decades now, vision programmes. Accustomed	India (B)	n villages ha Open	1025
4 [ Q.99 Marks	D S J t ((	For elev (A)	more than three decades now, vision programmes. Accustomed	India (B)	n villages ha Open	ve been
4 [ Q.99 Marks 1 <i>f</i>	D	For elev (A)	more than three decades now, vision programmes. Accustomed Exposed	India (B)	n villages ha Open	Question ID: 2004
4 [ Q.99 Marks Io 1 <i>f</i> 2 E	D	For elev (A)	more than three decades now, vision programmes. Accustomed Exposed	India (B)	n villages ha Open	Question ID: 2004

<b>Q.</b> 1	100								
		One word in the group of four words below is an odd word that does not the group. Select the alternative to pick the odd one out.							
		Pick the odd one out							
		(A) Instagram							
		(B) Google							
		(C) Twitter							
		(D) Facebook							
Ма	arks	1	Questi 2005	on ID:					
No			Options Details Correct	Option					
1	A								
2	B C								
4	D								