## Mangalam Electricals.

1. An isolated synchronous generate through a step up transformer of the (A) 1000 MVA	-	•	fault level at the	bus is :	the high voltage bus	
2. An amplifier circuit has an overall	• •			(D) 50MVA	of 1KO. The overall	
voltage gain of the amplifier is:	current gain or -100 and an in	put resistar	ice of Tokse with	tile load resistance	or 1K12. The overall	
(A) 5dB	(B) 10dB	(C) 20dB		(D) 40dB		
3. A four bit modulo 16 ripple count	er uses JK flip-flop. If the propa	agation dela	ay of each flip-flo	p is 50ns, the maxi	mum clock frequency	
that can be used is:						
(A) 20MHz	(B) 10 MHz	(C) 5 MHz		(D) 4 MHz		
4. If the characteristic equation of a			-	(D) He demonst	i	
(A) Over damped 5. In a 400 kV power network, 360 k	(B) Critically damped	(C) Under	•	(D) Un – damped		
400 kV connected at the bus is :	v is recorded at a 400 kV bus.	THE TEACTIVE	e power absorbed	i by a silulit reacto	or rated for 50 lvivAR,	
(A) 61.73 MVAR	(B) 55.56 MVAR	(C) 45.0 M	IVAR	(D) 40.5 MVAR		
6. The magnitudes of the open circu				· ·	25 $\Omega$ respectively. The	characteristi
impendance of the line is :					(A) 25 Ω	(B)
50 Ω (C) 75 Ω	(D) 100 Ω					
7. Two parallel wires separated by	a distance ' d ' are carrying a	current ' I '	in the same direct	ction. The magnet	ic field along a line par	allel to these
wires and midway between them:						
(A) Depends upon I	(B) Is zero	(C) Depen	ds upon d		n the permeability of	
				medium betw		
8. In the magnetising current complete because of :	onent of the no-load current	t of an indi	action motor is m	nuch larger than t	nat of a corresponding	transforme
(A) Additional friction and v	winding loss in motor	(B) Differe	nt winding config	uration on stator		
(C) Increased flux requirem			gap in the magnet			
<ol> <li>A transformer designed for opera compared with full load efficiency at (A) Increase marginally</li> </ol>		ency on full		:	crease Marginally	atiligs. Wilei
10. The hot resistance of the filamer	_		nce because the te	emperature co-effi	icient of the filament is:	;
(A) Negative	(B) Infinite	(C) Zero		(D) Positive		
11. If the applied voltage of a certain circuit remains unsaturated), the (A) Change to three times t	maximum core flux density wi	ill :		uced to 50% (assur times the original v		
(C) Change to 0.5 times as the original				me as the original v		
12. The power factor of a squirrel ca	ge induction motor is					
(A) low at light load only.	(B) low at heavy load only.		(C) low at light and	d heavy load both.	(D) low at rated load	only.
( , , , , , , , , , , , , , , , , , , ,	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		(-,	,	( )	- /
13. A two-winding single phase transpower-factor lagging load the vo	ltage regulation will be					
(A) 4.5%.	(B) less than 4.5%.	(C) more t		(D) 4.5% or more	e tnan 4.5%.	
14. The eddy current loss in an a-c el (A) 25 watts	(B) 59 watts		(C) 100 matts	(D) 400	) watte	
15. A 1.8°step, 4-phase stepper mote	• •		• •	` '		
(A) 40	(B) 50	-	(C) 100	(D) 80		
16. A salient pole synchronous moto	• •		• •	· ·		
(A) come to stop. (B) continue to ru (C) continue to run at a speed slightly	ın at synchronous speed.				s than the synchronous s	speed.
17. For the equation, s - 4s + s + 6 =	0 the number of roots in the lo	eft half of s	-plane will be			
(A) One	(B) Two		(C) Three	(D) Zer	0	
18. HVDC Transmission is mainly use	d for					
	ower over a very long distance ver requirement in the operation		_	o systems with sam cs at the converter	ne nominal frequency stations	
19. Usually in a thermal power plant (A) Less than 700 gm	the amount of good quality of (B) Greater than 700 gm	-	d to Generate 1un (C) Greater than 1		ne of these.	
	-					

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20. The transistor circuit shown uses a silicor				rent gain of	100. The <b>v</b>	alue of V0 is
		+10V				
		Ť				
			ユ			
	10kg	2	50kΩ			
		T	J			
		$\Box$				
			*			
			V <sub>0</sub>			
		1000	<sup>2</sup> U			
			<u> </u>			
(A) 4.65A (B) 5V			— (C) 6.3V		(D) 7.23\	,
21. An average reading digital multi-meter re		ith a cosino	` '	me innut ar		
(A) 20/ $\sqrt{2}$ V	(B) 10/ √3 V	itii a tosiile	(C) 20 √3 V	anie input ai	(D) 11.1	
(A) 20) V2 V	(B) 10/ V3 V		(C) 20 V3 V		(D) 11.1	•
22. A field excitation of 20A of a certain alter	nator results in an ar	mature cur	rent of 400 A in s	short circuit	and a teri	minal voltage of 2000
V on open circuit. The magnitude of the i						
(A) 1 V	(B) 10 V		(C) 100 V		(D) 1000	V
23. A PLC is capable of						
(A) Counting, and calculating analog signals	(B) Comparing and	alog signals	(C) Processing	analog signa	ls	(D) All of the above
<b>24. A PLC is used to control</b> (A) Batch proces	ss (B) Manufacturing	g process	(C) Industrial pro	ocess	(D) All of	the above
25. The programming device in a PLC can be						
(A) An LCD hand-held device	(B) A video display	y unit with l	keyboard (C) Eit	her (a) or (b)	(D) None	e of the above
26. In the RUN/PROGRAM mode of a PLC						
(A) The program cannot be complet	ely erased		rogram can only			
(C) Both (a) and (b) can be done		(C) Either	(a) or (b) can be	done		
27. The main function of a ladder logic diagra						
(A) To control inputs based on the output con			uts based on the	input condit	ions	
(C) Both (a) and (b)	• •	e of the abo	ove			
28. In a transformer the voltage regulation w (A) Unity power factor (B) Lea	-		a nower factor	(D) 70ro	nowar fac	tor
(a) Only power factor (b) Lea	ading power factor	(C) Laggir	ng power factor	(D) Zero	power fac	tor
(A) Is in phase with the flux (B) Lags behind		(C) Leads	the flux by 90 de	agraa	(D) Is in a	phase opposite to that of flux
30. The current from the stator of an alterna				-	(0) 13 111	onase opposite to that of hux
	mmutator segments				on brushe	s
31. A motor which can conveniently be operated	_				J., D. 05.10	
(A) Squirrel cage induction motor	(B) Wound rotor in			nchronous m	otor	(D) DC shunt motor
32. The most suitable servomotor for low po	wer application is		` , ,			• •
(A) A DC series motor (B) A I	DC shunt motor	(C) An AC	two-phase indu	ction motor	(D) An A	C series motor
33. The rotor power output of a three phase	induction motor is 15	kW and th	ne corresponding	slip is 4%. T	he rotor o	copper loss will be
(A) 600W (B) 62		(C) 650W				
34. A step-up chopper is fed from a 220V dc s	source to deliver a loa	ad voltage o	of 660V. If the no	n-conductio	n time of	the thyristor is
100µs, the required pulse width will be						
(A) 100μs (B) 20		(C) 220µs	` '	•		
35. Four alternators, each rated at 5MVA, 11					uit level a	t the bus bars is
(A) 6.25MVA (B) 20		(C) 25MV				Datis of CT C
36. A three phase 11/66kV, delta-star transform. H.T.side will be equal to: (A) 1:23	ormer, procted by Me	erz-price sch (B) 23:1	neme nas CT ratio	o of <b>400/5 o</b> (C) 23:√3		. <b>Ratio of C.T. On</b> (D) √3:23
37. The insulation resistance of a 20km long	underground cable is				e insulatio	
10km long cable will be : (A) 16MΩ	moration shift	(B) 32MΩ		(C) 4MΩ		(D) 2MΩ
38. In which one of the following modes of o	peration, shift registe	er ceases to	work as a snift i	egister?		

(A) SISO

(B) SIPO

(C) PISO

(D) PIPO

39. The peak input voltage to a bridge rectifier is 1000V at 5Hz. The dc output voltage and ripple respectively are

(A) 318V & 50Hz (B) 318V & 100Hz (C) 636V & 50Hz (D) 636V & 100Hz

40. Two 3-limb, 3-phase delta-star connected transformers is of Dy1 and the other is of Dy11 connection. The phase difference between the corresponding phase voltage of the secondaries would be  $(A) 0^0$   $(B) 30^0$   $(C) 60^0$   $(D) 120^0$ 

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ANSWER THE BELOW QUESTION							
Q1: What do I comprehend by sales and marketing?							
Q2: Why do I intend to build a career in sales and marketing?							
Q3: Why do I consider myself fit for sales and marketing job?							