

18/B/C/S-2/4/E

Booklet Series - A

33/231

PAPER-I ELECTRICIAN (THEORY) SEMESTER II

TIME: 3 HRS.

MARKS: 150

N	ote: Attempt all the questions. All q	uestions carry equal marks.				
C	hoose the correct answers:-					
1.	The maximum permissible voltage drop in a power industrial circuit should not be more than of the declared supply voltage.					
	a) 10%	b) 7%				
	c) 5%	d) 2%				
2.	The chemical used in a Breather of the transformer is					
	a) Potassium chlorate	b) Silica gel				
	c) Potassium dichromate	d) Sodium silicate				
3.	In surface conduit wiring, the saddles should not be fixed at intervals more than However, where bends or other fittings are used, they should be fixed at the distance of on either side from the center of such fittings.					
	a) 2.0 m, 80 cm	b) 1.8 m, 70 cm				
	c) 1.2 m, 30 cm	d) 1.5 m, 50 cm				
4.	While testing the wiring installation in to a) Switch OFF the mains power su b) Switch ON the mains power su c) Keep all the live, neutral & eart d) Keep all the live, neutral & eart	pply h wires should be shorted together				
5.	The device which works on the exc	essive oil vapors in a transformer tank and it cuts off the				
	transformer from circuit as soon as th	e fault occurs is				
	a) Air break switch	b) Gas filled thermostate				
	c) Buchholz Relay	d) Reed Relay				
6.	Punch through IGBTs have					
	a) Slow Turn OFF	b) Slow Turn ON				
	c) Stable Turn ON	d) Faster Turn OFF				
7.	7. The percentage change in output voltage from no-load to full-load is termed as the of the transformer.					
	a) Efficiency	b) Voltage Regulation				
	c) Turn Ratio	d) Copper Losses				
8.	The sensitivity of a moving coil volti	meter is defined as				
	a) Ohms/Volt	b) Ohms volt				
	c) Volt Ampere	d) Volt/Ohm				
		reated with nitro PDF professiona download the free trial colling at altraged.com/collessions				

-2.-

Booklet Series - A

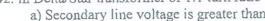
33/231

9. The function of the expands or contracts. a) Breather c) Conservator	is to maintain the oil level in the transformer tank as the oil b) Explosion vent d) Tap changer
10. When both deflecting controlling comes to-	g torque act and balance, the pointer of an indicating instrument
a) Mid position c) Three fourth position	b) Maximum position d) Rest
11. PMMC instrument is used for-a) DC measurementc) Both AC/DC measurement	b) AC Measurement d) Calibration
12. The anode mud in a cell is collecta) Below anode rodc) On anode rod	b) Below cathode rod d) On cathode rod
13. The direction of rotation of a D.O.a) Fleming's right hand ruleb) Fleming's left hand rulec) Ampere's right hand grip ruled) Maxwell's cork screw rule	C. motor is determined by
14. A light fan sub circuit can accom a) 100 W c) 800 W	hmodate of maximum load of- b) 500 W d) 1 KW
15. The primary and secondary winda) Conductively Linkedc) Not at all linked	b) Inductively Linked d) Electrically Linked
16. The size of a conductor used in pa) Operating voltagec) Power factor	b) Type of insulation used d) Current to be carried
the size less than	ize of copper conductor used in domestic wiring must not be of b) 1/1.01 mm
a) 1/1.12 mm c) 1/0.75 mm	d) 1/0.50 mm
18. PVC stands for-a) Poly variable conductorsc) Pre verified conductors	b) Poly vinyl chlorided) Poly voltage chloride
19. Isolation of heating coil from mea) Varnishc) Mica film	b) PVC coating d) Porcelain
	created with nitro PDF professional download the free trial online at oitropdf.com/professional

20. One of the main advantages of of and lamps/fans which are accessible for inspection a) Tree system c) Loop-in system	wiring is that, all the joints are at the switches on in case of faults. b) Joint Box or Tee system d) Both (a) & (b)
21. No steel conduit of less than in diam	neter should be used in wiring system.
a) 12.7 mm	b) 11.2 mm
c) 10.5 mm	d) 9.7 mm
,	
22. Primary winding of a transformer will be short	
a) DC supply is applied	b) AC supply is applied
c) Input impedance is increased	d) All of these
23. The name given to the transformer whose induc	ed secondary voltage is same as the applied
primary voltage is	
a) Auto Transformer	b) Current Transformer
c) Constant Voltage Transformer	d) Isolation Transformer
24. A transformer is rated in-	
a) KW	b) KVAr
c) KVA	d) KV
25. Tapping of a transformer is generally given in-	
a) HV side	b) LV side
c) Any side	d) Together HV & LV side
26. Short circuit tool of a transformer determines-	
a) Core loss	b) Copper loss
c) Iron loss	d) Hysteresis loss
27. A multiplier for a voltmeter is a) A high resistance in series with the meter m b) A high resistant in parallel with the meter m c) Normally less than 1 ohm resistance in seried) Low resistance in series as well as parallel	novement es with the meter movement
28. When two inputs of a cathode Ray Oscillosco	and are sinuspide of same amplitude 90° out of
phase the pattern generated will be-	ope are sinusoids of same amplitude 90° out of
a) Straight line at 45° with x-axis	b) Of oval shape
c) A Vertical line	d) A circle
c) A vertical line	4) 11 011010
29. What is considered as the heart of the Cathode I	Ray Oscilloscope?
a) Saw-tooth Generator	b) Cathode Ray Tube
c) Horizontal Amplifier	d) Vertical Amplifier
0) 110112011011 1 211111111	1
30. In the Y secondary of a transformer the line curr	rent I _e at phase current I _{ph} are connected as-
a) $I_e = I_{ph}$	b) $I_e = \sqrt{3} I_{ph}$
c) $I_{ph} = \sqrt{3}I_{l}$	d) $I_e = 3 I_{ph}$
C) 1pn 1011	-/ -c



31. ELCB is used for- a) Open circuit c) Personnel shock	b) Short circuit d) All of these
32. A full wave rectifier with capacitor filter is usea) Half wave rectification onlyc) Rectification and Ripple filtering	b) Full wave rectification only
	easured on a non-linear scale.
a) Resistance c) Current	b) Voltage d) All of these
34. The working of is based on residual of a) MCB c) MCCB	b) ELCB d) Relay
35. If a 10:1 transformer is supplied with 20 V DC, a) 2 V DC c) 200 V DC	the secondary voltage will be- b) 2 V AC d) Zero
36. An induction type measuring instrument is useda) ACc) Both AC & DC	b) DC d) Any of AC or DC
37. The ripple filtering, the following can be used-a) Inductorc) Resistor	b) Capacity d) Transistor
38. The core loss if a transformer may be determine	ed using-
a) Short circuit testc) Wheatstone bridge	b) Open circuit test d) All of these
39. A Dynamometer instrument is mainly used as a	ı/an
a) DC ammeter	b) Wattmeter
c) DC voltmeter	d) Ohmmeter
40. What force in analog instrument quickly brings	the moving system to rest in its final position?
a) Damping force	b) Controlling force
c) Deflecting force	d) Force at rest
41. The insulation resistance is measured by	
a) Ohm meter	b) Insulation meter d) Wien bridge
c) Megger	a) with orage
42. In Delta/Star transformer of 1:1 turn ratio-	nary line voltage



- b) Primary line voltage is greater than secondary line voltage c) Primary line voltage is equal to secondary line voltage d) All of these

18/B/C/S-2/4/E





18/B/C/S-2/4/E

Booklet Series - A

33/231

starter is .	full liaving all affliature resistance of 0.2 offlis, without	
a) 11 amps	c) 1100 amps	
*	d) 11000 amps	
b) 110 amps	d) 11000 anips	
44. The relation between voltage and turns of	f a transform is-	
a) $\frac{V_1}{V_2} = \frac{N_1}{N_2}$	b) $\frac{V_1}{V_2} = \frac{N_2}{N_1}$	
a) $\frac{1}{V_2} - \frac{1}{N_2}$	V2 N1	
V1 N1 I	V1 N1	
c) $\frac{V_1}{V_2} = \frac{N_1 L}{N_{12}}$	$d) \frac{V_1}{V_1} = \frac{N_1}{N_2}$	
7 2 17 22		
45. The starting resistance of 3 point starter i	n D.C motor is connected with	
a) Parallel across the armature		
b) Series with the armature		
c) Parallel across the field winding		
d) Series with the field winding		
d) series with the floid winding		
46. The flux in the core of a single phase tran	nsformer is	
a) Purely alternating one	b) Purely rotating one	
c) Partly alternating & partly rotating		
c) Partiy afternating & partry rotating	a) Constant	
47. Two things which are same for primary a	and secondary of a transformer are	
a) Resistance and leakage reactance	b) Ampere turn and volts per turn	
c) Current and induced voltage	d) Number of turns and power	
0) 0 11 11 11 11 11 11 11 11 11 11 11 11 1	*	
48. A transformer is an efficient device becar	use it	
a) Use capacitive coupling	b) Uses inductive coupling	
c) Uses electric coupling	d) Is a static device	
1 0	•	
49. When the secondary of a transformer is s	hort circuited, the primary inductance	
a) Is decreased	b) Remains the same	
c) Is increased	d) Becomes zero	
50. FET has-		
a) High input impedance	b) Low input impedance	
c) Zero impedance	d) None of these	

