**ABB Placement Paper Held On 2 May 2004 At Vadodara (Technical)**

**Rated : +8 , -1**

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(1) in a ckt. We r giving voltage of 50 Hz as well as 60. then what will be the resultant frequency.  
  
(a)less than 50 (b)more than 60(c)in between 50 & 60 (d)none  
  
according to our conclusion answer will be none because if we apply two frequency component resultant frequency we can not say with such an ease. U should confirm the answer  
  
2.In a ckt a single resistor is connected across a d.c. source, what will be the effect on current in first resistor if we connect one more resistance in parallel with earlier one.  
  
Ans:- no change since it is a parallel combination.  
  
3.why we don,t like flashover in transmission line (t-line)-  
  
(a ) it may create earth fault  ( b ) it reduces the life of insulator.....  
  
4.total no of strands in a acsr conductor is 81, then what is the no. of conductor in its outer layer....(a)36 (b)18 (c)24.......Also read some more on acsr.  
  
5.Two questions based on p.u. calculation like , p.u. calculation is given with respect to some old base and u have to calculate it with reference to new base.  
  
6.which table is referred for sag calculation-  
  
Ans:- stringing   
  
7.in a R-L ckt a ac voltage is applied , such that instantaneous power is negative for 2ms, then what will be the power factor.  
  
(a) 9 deg, (b) 18 deg, (c) 36 Deg  
  
8. In an incandescent lamp  
  
(a) luminous intensity is more than non-luminous intensity  
  
(b) ,, ,, ,, less ,, ,,  
  
Ans: Since efficiency is less than 100%, hence ans is (b), u should confirm it further.  
  
9. In which motor no-load to full-load diff. is lowest  
  
(a) series motor, (b) shunt motor, (c) Compound motor  
  
Ans:  (b)  
  
10. In a 60Hz induction motor full load speed is 850 rpm then what is the Synchronous speed.   
  
(a) 900 rpm, (b) 950 rpm, (c) 1600 rpm Ans: (a)  
  
11. A sync. Motor is running at synch. Speed, if al of sudden D.C. excitation is removed, then  
  
(a) it will rotate at slip speed,  (b) it will stop,  ( c) it will continue to rotate at sync. Speed  
  
Ans: (a), because actually it will acts as Induction motor.  
  
12.  A transmission line is designed for 50Hz, 440KV. If we want to transfer power at 60Hz, 440 KV, then the power transfer capability will  
  
(a) decrease, (b) Increase, (c) None  
  
Ans: (a).as P=( |Vt| |Ef| sin (delta) ) / X, where (delta) is torque angle.  
  
13. Increased rotor resistance in rotor ckt of induction motor is related with  
  
(a) high starting torque, (b) more speed variation   Ans: (a)  
  
14.  In the formulae E = 4.44 f N Ã", Ã" is  
  
(a) Avg value, (b) Rms value, (c) Maximum value   Ans: (a)  
  
15. Voltage & current in a ckt is given by V= V1+j V2 and I= I1 +j I2, then rms power is  
  
16. Input impedence of MOSFET is  
  
Ans:-  more than BJT  
  
17. Remember truth table of AND, NOR, NAND, OR, EX-OR ETC...  
  
18. What is Truth Table Explain?  
  
19. Conversion of Binary number into Equivalent decimal No.  
  
20. Megger is used for the measurement of   
  
(a) Insulation resistance, (b) Conductor resistance  Ans:  (a)  
  
21. Form factor for sinusoidal as well as DC  
  
22. Formulae of Regulation (Vs- Vr)\* 100/ Vr, then transmission line is  
  
(a) short transmission line, (b) long, (c) medium.  Ans: (a)  
  
23. Improvement in power factor reduces  
  
(a) power consumed by consumer, (b) power generation, (c) both a & b    Ans: (c)  
  
24. Read about field test of Series Motor  
  
25. No-load test for Synchronous motor, the graph is drawn  
  
Ans:- stator open ckt emf Vs field current  
  
26. An AC voltage of 50Hz is impressed in a resistive ckt, the oscillating power has a frequency   
  
(a) 50 Hz, (b) 100, (c) no oscillating power is there in resistive ckt.   Ans: (a)  
  
27. Insulation used in transformer \_\_\_\_\_\_\_\_\_\_\_leakage flux.  
  
(a) increases, (b) decreases.  Ans: (b)  
  
28.After rain what happens to Insulator   
  
(a) break-down strength of Insulator decreases, (b) Arch length reduces   Ans: (b)  
  
29.Diversity factor helps to ............(what ?)  
  
[Read diversity factor, load factor, Reserve capacity factor in depth, with calculation]  
  
30. Why capacitance is shown as a Shunt element in analysis of transmission line  
  
(a) it is between Conductor & earth, (b) because Admittance is used for calculation of capacitive reactance   Ans: (a)  
  
31. B-R-Y sequence is followed in three phase system, if phase voltage in B-phase is Vm sin 100, then the phase voltage in R-phase would be   
  
Ans:- Vm sin (-20)  
  
32. In a particular ckt I = Im Sin (wt -270) and V = Vm Sin wt, then type of ckt is   
  
Ans:-  pure resistive ckt  
  
33. In a L-R ckt energy lost = 2000 W, energy conserved = 500W, then what is the time constant?  
  
Ans:  time constant = L/R = 0.5  
  
34. In electro-dynamometer A' meter & wattmeter the type of scale is  
  
Ans: Non-uniform  
  
35. For the same current carrying capacity corona loss of ACSR will be \_\_\_\_\_\_\_\_than copper conductor.   
  
(a) more, (b) less, (c) equal. Ans:(b)  
  
36. A R-C ckt , supplied with DC, a bulb is connected across the Capacitor, then what happens to the illumination, if we change the capacitance.  
  
Ans: No change at all  
  
37.  Read about surge impendence of over-head and under-ground cable, Surge impedence formula = sqrt(L/C)