For electrical engineering the question which were asked in year 2009 at "power grid" Entrance Exam. In power grid 50% question are numerical and 170 (120from core + 50 aptitude)question in 2 hour it is difficult to attend all questions but aptitude questions are quite easy but core question are really hard.....

1. resistance of ideal transformer winding
ans. zero
2. hysteresis loss in transformer depends on frequency as
ans. square of frequency
3. in no load test of transformer input power is equal to
ans. iron loss or constant losses
4. zero voltage regulation occurs in which power factor condition
ans. leading power factor condition
5. load sharing in parallel operation of transformer
ans. impedance is inversely proportional to KVA rating of transformer
6. relation between starting torque of slip ring induction motor and squirrel cage induction motor
ans. starting torque of slip ring induction motor is more than starting torque of squirrel cage induction motor
7. relation between rotor power input, slip and rotor copper loss in induction motor
ans. rotor copper loss is equal to slip time the rotor input power
8. relation between starting torque when induction motor start with the help of star delta starter and auto transformer
ans. in star delta transformer starting starting torque is 1/3 times the full load torque with some other factor
9. due to feedback which factor increases
ans. stability of the system
10. in second order system damping factor
11. numerical on peak overshoot
12.numerical on steady state error
13. numerical on transfer function of system
14. numerical on stability of system
15. problem on root locus
16. effect of integral controller on system stability
ans. for closed loop system by integral controller steady state stability increases
17. to gate high starting torque starting method of induction motor
ans. external resistance starting method
18. to gate low starting power factor in starting of induction motor
ans. external reactance starting method
19. relation between power transferred by 1phase line and 2 circuit line
20.bundled conductors are used to

ans. reduce corona loss
21. relation between corona loss with frequency and diameter of conductor
ans. corona loss directly proportional to frequency and inversely proportional to diameter of conductor
22. series capacitor used in power system to
ans. series capacitor for stability of power system
23. insulation level is decided by
ans. switching over voltage
24. effect of using bundled conductor on inductance of conductor
ans. decreases
25. insulator type used when there is dead end or change in direction of conductor
ans. strain type
26. resistance switching used in which circuit breaker
ans. air blast circuit breaker
27. relation between resistance , inductance and capacitance in resistance switching
28. where are the lightning arrestars are located
ans. near the transformer
29. which type of relay are used in overloading
ans. thermal relay
30. whenever difference in current which relay is used
ans. differential relay
31. which distance relay is directional
ans. mho relay
32. damper winding are used in alternator for
ans. prevent hunting and provide high starting torque
33.effect of armature reaction
ans. both cross magnetising and demagnetising
34.question from inverted v curve of synchronous motor curve
35.numerical from source transformation technique
36. numerical related to find rms value of triangular wave
37. in series RLC circuit if frequency greater than resonent frequency than impedence offered by circuit
ans. inductive
38.numerical from dc switching of inductor , capacitor and resistance in a network
39. eddy current damping used in which type of instrument
ans. pmmc
40. fluid friction damping used in which type instrument
ans. horizontal MI
41. numerical from two wattmeter method

42. numerical from over ranging of digital instrument
43.two or three question from CRO
44.relation between latching current and holding current
ans. latching current> holding current
45. di/dt protection of thyrestor
ans . using inductor in series
46. difference between BJT and MOSFET
ans. in BJT sec. breakdown
47. terminal of IGBT
48. terminals of MOSFET
49. for proper commutation relation between circuit turn off time and thyristor turn off time
ans. circuit turn off time must be greater than thyristor turn off time
50. specific of earthing transformer
ans. no secondary