

Student Name: \_\_\_\_\_ Roll No: \_\_\_\_\_

1. What is the name of Multi-turn potentiometers?

- A) Multi turn dual pots      B) Multi turn trim pots  
C) Single turn trim pots      D) Single turn dual pots

C) Black, brown, black

D) Brown, black, red

2. What is the result of hysteresis loss in magnetic material?

- A) Energy loss takes place      B) Magnetic flux increases  
C) Eddy current decreases      D) Back emf increases

10. At which condition the cold resistance of the low voltage lamp is measured using ohmmeter?

- A) Lamp is ON at 100 Degree Centigrade      B) Lamp is ON at 400 Degree Centigrade  
C) Lamp is OFF at room temperature      D) Lamp is ON at 320 Degree Centigrade

3. What is the reason for the use of contactors in control circuits?

- A) To protect the load from arcing      B) To increase load current  
C) To decrease load current      D) Supply power to loads

11. What is the purpose of vacuum contactors in electrical panel?

- A) Fast switching      B) Packet switching  
C) Slow switching      D) Medium switching

4. What is the purpose of trimmer capacitor?

- A) Filtering      B) Fine tuning  
C) Decoupling      D) Coupling

12. What is the unit of inductance?

- A) Farad      B) Henry  
C) Watts      D) Joule

5. Which property of the capacitor stores electrical energy in electrostatic field?

- A) Dielectric      B) Stray capacitance  
C) Capacitance      D) Capacitive reactance

13. Find the total inductance value of two inductors 10H and 15H of connected in series.

- A) 25 H      B) 10 H  
C) 05 H      D) 15 H

6. How many ohms is equal to one Mega ohm?

- A) 1000 kW      B) 2000 kW  
C) 10 kW      D) 100 kW

14. Which value is equal to one picofarad?

- A) 10<sup>-6</sup> Farad      B) 10<sup>12</sup> Farad  
C) 10<sup>-12</sup> Farad      D) 10<sup>6</sup> Farad

7. What is the name of effect of changing current in one coil, induces EMF in nearby coil?

- A) Self induction      B) Coupling  
C) Induction      D) Mutual induction

15. What type of ripple filter circuit is used for large load current requirements?

- A) RC filter      B) Inductor Input filter  
C) Capacitor Input filter      D) LC filter

8. Why the transformer core is made as thin laminations?

- A) To maximize eddy current losses      B) To increase core saturation losses  
C) To minimize eddy current losses      D) To increase the hysteresis losses

16. Which factor determines the inductance value?

- A) Frequency of the current      B) Current flow through the coil  
C) Material of the coil      D) Diameter of the coil

9. What is the colour code for 100 Ohm resistor?

- A) Brown, black, brown      B) Brown, brown, brown

17. What is the effect on the transformer operated below the rated voltage?

- A) Leads to interwinding leakage      B) Burn out windings

- C) Transformer heated up excessively      D) Delivers reduced secondary voltage

18. What is the power dissipated if 10mA current flows through a 10K Ohm resistor?

- A) 4000 milli watts      B) 3000 milli watts  
C) 2000 milli watts      D) 1000 milli watts

19. What is the main problem caused for severe pitting in relays?

- A) Low contact current      B) Excessive number of operations  
C) Chatter during a slow release      D) Excessive contact current

20. Which part of the relay causes most trouble?

- A) Hinges      B) Relay coil  
C) Frame and core      D) Relay contacts

21. What is the phase relationship between the applied voltage and current in the primary of a transformer with open secondary winding?

- A) Current lags voltage by 90 Degree      B) Current leads voltage by 90 Degree  
C) Voltage lags current by 45 Degree      D) Voltage leads current by 45 Degree

22. Which meter is used to find the exact resistance value of resistors?

- A) Volt meter      B) Ammeter  
C) Ohm meter      D) Watt meter

23. What is the cause of burnt relay contacts?

- A) Excessive number of operations      B) Chatter during a slow release  
C) Excessive contact current      D) Low contact current

24. Which component opposes any change in current?

- A) Capacitor      B) Diode  
C) Resistor      D) Inductor

25. Find the total resistance value of 10 ohms and 20 ohms connected in parallel.

- A) 66.66 Ohms      B) 6.666 Ohms  
C) 666.6 Ohms      D) 6666 Ohms

26. Which unit is used to measure capacitance value?

- A) Henry      B) Mho  
C) Farad      D) Ohm

27. How power rating is specified for transformers?

- A) Voltage (V)      B) Volt ampere (VA)  
C) Watts (W)      D) Horse power (HP)