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Answer Key

**Duration: 30 Mins****Total Marks: 27****Q.ID: ITISKILL8169CC**

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

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

**Answer: C) Capacitor Input filter**

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

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

**Answer: A) Mutual induction**

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

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

**Answer: C) Excessive contact current**

4. Which unit is used to measure capacitance value?

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

**Answer: B) Farad**

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

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

**Answer: B) Supply power to loads**

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

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

**Answer: C) 1000 kW**

7. Which component opposes any change in current?

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

**Answer: B) Inductor**

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

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

**Answer: B) Multi turn trim pots**

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

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

**Answer: C) Voltage leads current by 45 Degree**

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

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

**Answer: B) To minimize eddy current losses**

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

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

**Answer: C) Ohm meter**

12. What is the cause of burnt relay contacts?

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

**Answer: D) Excessive contact current**

13. Which factor determines the inductance value?

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

**Answer: D) Diameter of the coil**

14. Which value is equal to one picofarad?

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

**Answer: D) 10<sup>-12</sup> Farad**

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

- A) Lamp is OFF at room temperature      B) Lamp is ON at 100 Degree Centigrade

C) Lamp is ON at 320 Degree Centigrade  
D) Lamp is ON at 400 Degree Centigrade

**Answer: A) Lamp is OFF at room temperature**

**16.** Which part of the relay causes most trouble?

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

**Answer: D) Relay contacts**

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

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

**Answer: C) 6.666 Ohms**

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

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

**Answer: B) 1000 milli watts**

**19.** What is the unit of inductance?

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

**Answer: A) Henry**

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

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

**Answer: D) Fast switching**

**21.** How power rating is specified for transformers?

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

**Answer: D) Volt ampere (VA)**

**22.** What is the purpose of trimmer capacitor?

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

**Answer: A) Fine tuning**

**23.** What is the colour code for 100 Ohm resistor?

- A) Black, brown, black  
B) Brown, black, brown  
C) Brown, black, red  
D) Brown, brown, brown

**Answer: B) Brown, black, brown**

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

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

**Answer: A) 25 H**

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

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

**Answer: A) Energy loss takes place**

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

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

**Answer: D) Capacitive reactance**

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

- A) Burn out windings  
B) Delivers reduced secondary voltage  
C) Leads to interwinding leakage  
D) Transformer heated up excessively

**Answer: B) Delivers reduced secondary voltage**