

Duration: 30 Mins

Total Marks: 25

ID: ITISKILL4196QY

Student Name: _____ Roll No: _____

1. Which is the first step followed in troubleshooting of electronic circuit?

- | | |
|--------------------|------------------------------|
| A) Thermal test | B) Physical and sensory test |
| C) Mechanical test | D) Chemical test |

2. Which is the 3 terminal, negative voltage regulator IC?

- | | |
|------------|-----------|
| A) IC 7812 | B) LM 320 |
| C) IC 7905 | D) LM 340 |

3. What is the output frequency of the pulsating DC in a two diode fullwave rectifier?

- | | |
|------------------------------------|--|
| A) Same frequency of the A/C input | B) Three times the input A/C frequency |
| C) Half of the input A/C frequency | D) Double the input A/C frequency |

4. How much is the maximum load current of the negative voltage regulator IC 7912?

- | | |
|----------|-----------|
| A) 1.0 A | B) 2.0 A |
| C) 1.5 A | D) 0.55 A |

5. What is the minimum current rating of four diode bridge rectifier to supply load current of 1.8 Amp?

- | | |
|------------|------------|
| A) 1.8 Amp | B) 2.0 Amp |
| C) 5.0 Amp | D) 0.9 Amp |

6. Which IC package consist of 100 to 1000 transistors?

- | | |
|--|-----------------------------------|
| A) Small scale integration (SSI) | B) Medium scale integration (MSI) |
| C) Very large scale integration (VLSI) | D) Large scale integration (LSI) |

7. What is the current rating of voltage regulator IC LM338K?

- | | |
|-------|-------|
| A) 4A | B) 5A |
| C) 3A | D) 2A |

8. Which type of voltage regulator is IC 723?

- | | |
|---|---|
| A) Multipin variable voltage regulator | B) Three pin negative voltage regulator |
| C) Three pin positive voltage regulator | D) Three pin adjustable voltage regulator |

9. What is the peak to peak voltage in a bridge rectifier circuit with load current of 10 mA, capacitance of 470 F and 50 Hz supply frequency?

- | | |
|------------|------------|
| A) 0.213 v | B) 3.567 v |
| C) 2.134 v | D) 1.525 v |

10. What is the disadvantage of the two diode full wave rectifier compared with a bridge rectifier?

- | | |
|-----------------------------------|---|
| A) The need of bulky transformer | B) DC output level is higher |
| C) The ripple frequency is higher | D) Each diode carries half the load current |

11. What is the meaning of maximum safe reverse voltage across a diode?

- | | |
|-----------------------|-------------------------------|
| A) PIV voltage | B) Reverse break down voltage |
| C) Break down voltage | D) Knee voltage |

12. What is the process of adding impurities to a pure semiconductor material?

- | | |
|------------|--------------|
| A) Forming | B) Diffusion |
| C) Doping | D) Etching |

13. Which component filter the ripples in the rectifier circuit?

- | | |
|----------|--------------|
| A) TRIAC | B) Capacitor |
| C) Diode | D) DIAC |

14. Which impurity is added to form P - type semiconductor material?

- | | |
|------------|---------------|
| A) Arsenic | B) Phosphorus |
| C) Gallium | D) Antimony |

15. Which diode is used in low power communication circuits?

- | | |
|---------------------|----------------------|
| A) Rectifier diodes | B) High power diodes |
| C) Signal diodes | D) Switching diodes |

16. When does the zener diode begins to conduct in the reverse biased condition?

- A) Voltage across it reached the zener voltage
B) After the barrier voltage cancelled
C) When bias voltage reached 0.7V
D) Voltage across zener reached 0.3V

17. What is the name of the process of converting AC into DC voltage?

- A) Rectifying
B) Amplifying
C) Demodulating
D) Inverting

18. Which three terminal voltage regulator IC has adjustable output?

- A) LM 100
B) LM 305
C) LM 105
D) LM 317

19. What is the maximum safe reverse voltage rating of a diode?

- A) PIV voltage
B) Forward break down voltage
C) Knee voltage
D) Break down voltage

20. What is the effect on the output voltage in a bridge rectifier circuits, with one diode open?

- A) Very low voltage
B) No output DC voltage
C) Half of the rated output voltage
D) Full output rated voltage

21. Which impurity is added to pure semiconductor to form N-type material?

- A) Indium
B) Boron
C) Gallium
D) Arsenic

22. Which parameter is maintained constant in zener diode?

- A) Current
B) Voltage
C) Power
D) Resistance

23. How many transistors are built inside the Very Large Scale Integration (VLSI) IC package?

- A) 1000 and above
B) 10 to 100 transistors
C) 100 to 1000 transistors
D) 1 to 10 transistors

24. What is the output pulse frequency of the full wave rectifier with input frequency of 50 Hz?

- A) 40 Hz
B) 60 Hz
C) 100 Hz
D) 200 Hz

25. Which method is followed to troubleshoot the problem causing section by the symptom?

- A) Logical approach method
B) Sensory test method
C) Trial and error method
D) Step by step method