Monthly test for month of February-2026

Q. ID: ITISKILL9966RT

Trade theory

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Question Paper

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Score: 16/25 (64.00%)

Code: 8618

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

A) 1000 and above | B) 1 to 10 transistors
C) 10 to 100 transistors | D) 100 to 1000 transistors (Incorrect)

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

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

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

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

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

A) LM 100 | B) LM 105
C) LM 305 | **D) LM 317 (Correct)**

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

A) 1.0 A | B) 1.5 A
C) 2.0 A (Correct) | D) 0.55 A

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

A) 2A | B) 3A
C) 4A | **D) 5A (Correct)**

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

A) Step by step method | B) Sensory test method
C) Trial and error method | **D) Logical approach method (Correct)**

8. What is the current rating of voltage regulator IC LM317L?

A) 0.1 A | B) 0.2 A (Incorrect)
C) 0.3 A | D) 0.4 A

9. What is the range of output voltage of regulator IC LM 317?

A) 0 to 25 V | B) 0 to 30 V
C) 0 to 32 V | **D) 1.2 V to 32 V (Correct)**

10. Which type of voltage regulator is IC 723?

A) Multipin variable voltage regulator (Incorrect) | B) Three pin positive voltage regulator
C) Three pin negative voltage regulator | **D) Three pin adjustable voltage regulator**

11. What is the natural shape of a quartz crystal?

A) Cylindrical shape with pyramid at ends | B) Cube shape with pyramid at ends
C) Pentagonal prism with pyramid at ends | **D) Hexagonal prism with pyramid at ends (Correct)**

12. What is the difference of Colpitts oscillator compare to Hartley oscillator?

A) Uses split inductor | **B) Uses split capacitor**
C) Uses crystal oscillator (Incorrect) | D) Uses SCR combination

13. What is the percentage of charge accumulated by the capacitor at the end of 2 time constant limit?

A) 0.4 | B) 0.5
C) 0.632 | **D) 0.864 (Correct)**

14. How many time constants required to change a capacitor to 63.2% of its full charge voltage?

A) Four time constant | B) Three time constant
C) Two time constant | **D) One time constant (Correct)**

15. What type of arrangement is required to sustain the oscillations of the oscillator circuit?

A) Provide negative feedback | **B) Provide regenerative feedback (Correct)**
C) Increase the bias voltage | D) Increase the value of inductor

16. What type of feed back is used by the Wein-bridge oscillator to oscillate the signal?

A) No feedback | B) Positive feedback

C) Negative feedback

D) Both positive and negative feedback (Correct)

17. How to improve the frequency stability in oscillator circuits?

A) Increase the supply voltage

B) By using quartz crystal (Correct)

C) Using L and C

D) Improve the property of circuits

18. Which is the transistor used to operate the Colpitts oscillator?

A) AC 127

B) BF 194B (Correct)

C) BC 148B

D) AC 188

19. How to overcome the problem of frequency drift in LC oscillators?

A) Apply opposite polarity of signal

B) Provide negative feedback

C) Using high Q coils and good quality capacitors (Correct)

D) Increase the supply voltage

20. Why LC tuned circuits are not used in audio frequency oscillators?

A) LC values required is too large (Correct)

B) LC components are not available

C) LC tank circuit does not produce AF signals

D) LC tank circuit operation requires high voltage

21. How many degrees is equal to one radian?

A) (Pi)/(360)

B) (360)/(Pi)

C) (Pi)/(180)

D) (180)/(Pi) (Correct)

22. Which is equal to sin θ?

A) Opposite Side/Hypotenuse (Correct)

B) Hypotenuse/Opposite side

C) Adjacent Side/Hypotenuse

D) Hypotenuse/Adjacent side

23. What is equal to cos θ?

A) Hypotenuse/Adjacent Side (Incorrect)

B) Adjacent Side/Hypotenuse

C) Opposite side/Hypotenuse

D) Hypotenuse/Opposite Side

24. What is equal to tan θ?

A) Opposite Side/Hypotenuse

B) Adjacent Side/Hypotenuse (Incorrect)

C) Opposite Side/Adjacent Side

D) Adjacent side/Opposite side

25. What is the value of tan θ if sin θ = 4/5 ?

A) (4/5)

B) (5/3)

C) (3/4) (Incorrect)

D) (4/3)