

Varma ITI KOLLEGAL

Monthly test for month of February-2026

Q. ID: ITISKILL9966RT | February 2026

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Student Name	Abdul Shoaib E M	Access Code	1028
Attempt No.	#1	Completion Time	11:14 AM
Rank	#13	Total Questions	25

11 SCORE

25 MAX MARKS

11 CORRECT

14 INCORRECT

Answer Review

Q1 **INCORRECT** 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 ☐

Q2 **INCORRECT** Which IC package consist of 100 to 1000 transistors?

A. Large scale integration (LSI) ☐

B. Small scale integration (SSI) ☐

C. Medium scale integration (MSI) ☐

D. Very large scale integration (VLSI) ☐

Q3 **CORRECT** Which is the 3 terminal, negative voltage regulator IC?

A. LM 320

B. LM 340

C. IC 7905 ☒

D. IC 7812

Q4 **CORRECT** Which three terminal voltage regulator IC has adjustable output?

A. LM 100

B. LM 105

C. LM 305

D. LM 317 ☒

Q5 **INCORRECT** 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 ☒

D. 0.55 A

Q6 **INCORRECT** What is the current rating of voltage regulator IC LM338K?

A. 2A

B. 3A

C. 4A ☐

D. 5A ☒

Q7 **INCORRECT** 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 ☐

Q8 **INCORRECT** What is the current rating of voltage regulator IC LM317L?

A. 0.1 A ☐

B. 0.2 A

C. 0.3 A

D. 0.4 A ☐

Q9 **INCORRECT** 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 ☐

Q10 **INCORRECT** Which type of voltage regulator is IC 723?

A. Multipin variable voltage regulator ☐

B. Three pin positive voltage regulator

C. Three pin negative voltage regulator

D. Three pin adjustable voltage regulator ☐

Q11 **CORRECT** 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 ☒

Q12 **CORRECT** What is the difference of Colpitts oscillator compare to Hartley oscillator?

- A. Uses split inductor
- B. Uses split capacitor ☒
- C. Uses crystal oscillator
- D. Uses SCR combination

Q13 **INCORRECT** 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 ☒

Q14 **CORRECT** How many time constants required to charge 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 ☒

Q15 **CORRECT** What type of arrangement is required to sustain the oscillations of the oscillator circuit?

- A. Provide negative feedback
- B. Provide regenerative feedback ☒
- C. Increase the bias voltage
- D. Increase the value of inductor

Q16 **INCORRECT** 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 ☒

Q17 **CORRECT** How to improve the frequency stability in oscillator circuits?

- A. Increase the supply voltage
- B. By using quartz crystal ☒
- C. Using L and C
- D. Improve the property of circuits

Q18 **INCORRECT** Which is the transistor used to operate the Colpitts oscillator?

- A. AC 127
- B. BF 194B ☒
- C. BC 148B
- D. AC 188 ☐

Q19 **CORRECT** 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 ☒
- D. Increase the supply voltage

Q20 **INCORRECT** Why LC tuned circuits are not used in audio frequency oscillators?

- A. LC values required is too large ☒
- B. LC components are not available
- C. LC tank circuit does not produce AF signals
- D. LC tank circuit operation requires high voltage ☐

Q21 **CORRECT** How many degrees is equal to one radian?

- A. $(\pi)/(360)$
- B. $(360)/(\pi)$
- C. $(\pi)/(180)$
- D. $(180)/(\pi)$ ☒

Q22 **CORRECT** Which is equal to $\sin \theta$?

- A. Opposite Side/Hypotenuse ☒
- B. Hypotenuse/Opposite side
- C. Adjacent Side/Hypotenuse
- D. Hypotenuse/Adjacent side

Q23 **CORRECT** What is equal to $\cos \theta$?

A. Hypotenuse/Adjacent Side

B. Adjacent Side/Hypotenuse ☒

C. Opposite side/Hypotenuse

D. Hypotenuse/Opposite Side

Q24 **INCORRECT** What is equal to $\tan \theta$?

A. Opposite Side/Hypotenuse

B. Adjacent Side/Hypotenuse

C. Opposite Side/Adjacent Side ☒

D. Adjacent side/Opposite side ☐

Q25 **INCORRECT** What is the value of $\tan \theta$ if $\sin \theta = 4/5$?

A. $(4/5)$

B. $(5/3)$ ☐

C. $(3/4)$

D. $(4/3)$ ☒