# Sri Mahalingeswara ITI

## TEST - 07/ MAR-2026

Q. ID: ITISKILL0082JL | March 2026

**32.00%** 8 / 25

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| Student Name | Niranjan TP | Access Code | 6045 |
| Attempt No. | #1 | Completion Time | 10:23 AM |
| Rank | #60 | Total Questions | 25 |

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|---|---|---|---|
| **8** SCORE | **25** MAX MARKS | **8** CORRECT | **17** INCORRECT |

## Answer Review

Q1 CORRECT What is the unit of electric charge?

**A.** Volts

**B.** Hertz

**C.** Ampere

**D.** Coulomb

Q2 INCORRECT Which material contains eight electrons in valency layer?

**A.** Insulators

**B.** Conductors

**C.** Semiconductors

**D.** Intrinsic semiconductors

Q3 INCORRECT Which material is used as electrical insulator?

**A.** Gallium

**B.** Porcelain

**C.** Aluminium

**D.** Germanium

Q4 CORRECT How the single strand wire is called?

**A.** Flexible wire

**B.** Twisted wire

**C.** Hook up wire

**D.** Multi strand wire

Q5 INCORRECT Which energy is converted by the battery to produce electricity?

**A.** Electrical energy into light energy

**B.** Chemical energy into electrical energy

**C.** Mechanical energy into electrical energy

**D.** Electrical energy into mechanical energy

Q6 INCORRECT What is the percentage of sulphuric acid in electrolyte used for lead-acid batteries?

**A.** 12%

**B.** 25%

**C.** 27%

**D.** 40%

Q7 INCORRECT Which method is adopted to charge a car battery with voltage rating of 2.3 V per cell?

**A.** Float charging method

**B.** Trickle charging method

**C.** Constant current charging method

**D.** Constant voltage charging method

Q8 INCORRECT Why the load testing is done on the lead-acid battery?

**A.** Test the dimensional accuracy

**B.** Verify the rated power delivery

**C.** Measure the rated output voltage

**D.** Test I2R power loss in the battery cell

Q9 INCORRECT Which is the 3 terminal, negative voltage regulator IC?

**A.** LM 320

**B.** LM 340

**C.** IC 7905

**D.** IC 7812

Q10 INCORRECT What is the expansion of PRF related to frequency?

**A.** Power regulated frequency

**B.** Pulse repetition frequency

**C.** Pulse repetition frequency

**D.** Pulse probability frequency

Q11 INCORRECT What is the name of the ratio of ON-time pulse to the OFF-time pulse of multivibrator?

**A.** Control voltage

**B.** Pulse repetition □

**C.** Pulse repetition

**D.** Threshold comparator □

Q12 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 □

Q13 INCORRECT What is the resonant frequency range of a crystal?

**A.** Between 0.1 and 1MHZ □

**B.** Between 0.1 and 10 MHZ

**C.** Between 0.5 and 25 MHZ

**D.** Between 0.5 and 30 MhZ □

Q14 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

Q15 INCORRECT Which circuit is determined by the frequency of LC tank circuit?

**A.** Oscillator

**B.** Amplifier

**C.** Multiplexed

**D.** Demodulator

Q16 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

Q17 INCORRECT 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

Q18 INCORRECT Which circuits commonly use parallel-fed Hartley oscillators?

**A.** Stereo amplifiers

**B.** Radio receivers

**C.** Television receivers

**D.** Automatic voltage stabilizers

Q19 INCORRECT 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

Q20 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 □

Q21 INCORRECT 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

Q22 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

Q23 CORRECT 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

Q24 CORRECT Which component filter the ripples in the rectifier circuit?

**A.** DIAC

**B.** Diode

**C.** TRIAC

**D.** Capacitor □

Q25 CORRECT Which parameter is maintained constant in zener diode?

**A.** Power

**B.** Current

**C.** Voltage □

**D.** Resistance