Sri Mahalingeswara ITI

ITI Quiz - 24-Mar-2026 11:11 AM

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Student Name	Ramacharan	Access Code	1574
Attempt No.	#1	Completion Time	08:38 PM
Rank	#14	Total Questions	14

4 SCORE	**14** MAX MARKS	**4** CORRECT	**10** INCORRECT

Answer Review

Q1 INCORRECT 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 □

Q2 CORRECT 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 □

Q3 INCORRECT 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

Q4 CORRECT Which circuit is determined by the frequency of LC tank circuit?

A. Oscillator

B. Amplifier

C. Multiplexed

D. Demodulator

Q5 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

Q6 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

Q7 INCORRECT Which circuits commonly use parallel-fed Hartley oscillators?

A. Stereo amplifiers

B. Radio receivers □

C. Television receivers □

D. Automatic voltage stabilizers

Q8 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 □

Q9 CORRECT 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 □

Q10 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 □

Q11 INCORRECT Which is the transistor used to operate the Colpitts oscillator?

A. AC 127

B. BF 194B □

C. BC 148B □

D. AC 188

Q12 INCORRECT How many time constant period is required to fully charge a capacitor?

A. 10 time constants

B. 7 time constants □

C. 5 time constants □

D. 3 time constants

Q13 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

Q14 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 □