LCR-14MCQ-EM-TT-1ST

ITI Quiz - - -2026 03:50 PM

Q. ID: ITISKILL87495O

March 2026 | **Sri Mahalingeswara ITI** | Answer Key

Duration: 30 Mins **Total Marks: 14** **Q.ID: ITISKILL87495O**

1. What is the resonant frequency range of a crystal?

A) Between 0.5 and 30 MhZ B) Between 0.5 and 25 MHZ
C) Between 0.1 and 10 MHZ D) Between 0.1 and 1MHZ

Answer: A) Between 0.5 and 30 MhZ

2. Which circuits commonly use parallel-fed Hartley oscillators?

A) Television receivers B) Radio receivers
C) Stereo amplifiers D) Automatic voltage stabilizers

Answer: B) Radio receivers

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

A) 0.5 B) 0.4
C) 0.864 D) 0.632

Answer: C) 0.864

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

A) Four time constant B) Two time constant
C) Three time constant D) One time constant

Answer: D) One time constant

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

A) Uses crystal oscillator B) Uses split inductor
C) Uses split capacitor D) Uses SCR combination

Answer: C) Uses split capacitor

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

A) AC 188 B) BF 194B
C) AC 127 D) BC 148B

Answer: B) BF 194B

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

A) Using high Q coils and good quality capacitors B) Increase the supply voltage
C) Provide negative feedback D) Apply opposite polarity of signal

Answer: A) Using high Q coils and good quality capacitors

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

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

Answer: D) LC values required is too large

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

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

Answer: C) Provide regenerative feedback

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

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

Answer: A) By using quartz crystal

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

A) Negative feedback B) Both positive and negative feedback
C) No feedback D) Positive feedback

Answer: B) Both positive and negative feedback

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

A) Hexagonal prism with pyramid at ends B) Pentagonal prism with pyramid at ends
C) Cylindrical shape with pyramid at ends D) Cube shape with pyramid at ends

Answer: A) Hexagonal prism with pyramid at ends

13. How many time constant period is required to fully charge a capacitor?

A) 10 time constants B) 7 time constants
C) 3 time constants D) 5 time constants

Answer: D) 5 time constants

14. Which circuit is determined by the frequency of LC tank circuit?

A) Multiplexed
B) Amplifier
C) Demodulator
D) Oscillator

Answer: D) Oscillator