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Question Paper

Duration: 30 Mins**Total Marks: 12****ID: ITISKILL7500UI**

Student Name: _____ Roll No: _____

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

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

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

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

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

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

4. 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 30 MhZ D) Between 0.5 and 25 MHZ

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

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

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

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

7. How many time constants required to change a capacitor

to 63.2% of its full charge voltage?

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

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

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

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

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

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

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

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

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

12. 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 negative feedback D) Provide regenerative feedback