

**Chettinad**

College of Engineering & Technology

Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai.

Department of Electronics and Communication Engineering**EC8452 – Electronic Circuits II****Unit III - MCQ Bank**

1. Double tuned circuits are used in stages of a radio receiver.

A. IF

B. Audio

C. Output

D. None of the above

Answer: (A)

2. In the double tuned circuit, if the mutual inductance between the two tuned circuits is decreased, the level of resonance curve

A. Remains the same

B. Is lowered

C. Is raised

D. None of the above

Answer: (C)

3. If a high degree of selectivity is desired, then double-tuned circuit should have coupling

A. Loose

B. Tight

C. Critical

D. None of the above

Answer: (A)

4. In the double tuned circuit, if the mutual inductance between the two tuned circuits is decreased, the level of resonance curve

- A. Remains the same
- B. Is lowered
- C. Is raised**
- D. None of the above

Answer: (C)

5. The Q of a tuned amplifier is 50. If the resonant frequency for the amplifier is 1000 kHz, then bandwidth is

- A. 10 kHz
- B. 40 kHz
- C. 30 kHz
- D. 20 kHz**

Answer: (D)

6. The Q of a tuned amplifier is generally

- A. Less than 5
- B. Less than 10
- C. More than 10**
- D. None of the above

Answer: (C)

7. The Q of a tuned circuit refers to the property of

- A. Sensitivity
- B. Fidelity
- C. Selectivity**
- D. None of the above

Answer: (C)

8. If the resistance of the tuned circuit is increased, the Q of the circuit -----

- A. Is increased
- B. Is decreased**
- C. Remains the same
- D. None of the above

Answer: (B)

9. If L/C ratio of a parallel LC circuit is increased, the Q of the circuit

- A. Is decreased
- B. Is increased**
- C. Remains the same
- D. None of the above

Answer: (B)

10. If Q of an LC circuit increases, then bandwidth

- A. Increases
- B. Decreases**
- C. Remains the same
- D. Insufficient data

Answer: (B)

11. If two or more tuned circuits which are cascaded are tuned to slightly different resonant frequencies, it is possible to obtain an increased bandwidth with a flat pass bandwidth steep sides.

- A. Single tuned amplifier
- B. Double tuned amplifier
- C. Stagger tuned amplifier**
- D. None of the above

Answer: (C)

12. Tuned class C amplifiers are used for RF signals of

- A. Low power
- B. High power**

- C. Very high power
- D. None of the above**

Answer: (D)

13. A tuned amplifier is generally operated in _____ operation?

- A. Class A
- B. Class C**
- C. Class B
- D. None of the above

Answer: (B)

14. The voltage gain of a tuned amplifier is _____ at resonant frequency.

- A. Minimum
- B. Maximum**
- C. Half-way between maximum and minimum
- D. Zero

Answer: (B)

15. A tuned amplifier is used in _____ applications?

- A. Radio frequency**
- B. Low frequency
- C. Audio frequency
- D. None of the above

Answer: (A)

16. ----- are the advantages of double tuned amplifier over single tuned amplifier?

- A. Provides higher gain
- B. Provides large 3dB bandwidth.
- C. Possess flatter response having steeper sides.
- D. All of the above**

Answer: (D)

17. Different types of coil losses?

- A. Hysteresis loss
- B. Copper loss
- C. Eddy current loss
- D. All of the above**

Answer: (D)

18. Applications of Class C amplifier -----

- A. Amplify the signals at radio frequency
- B. Mixer circuits
- C. Both a and b**
- D. None of the above

Answer: (C)

19. In series resonance, there is

- A. Voltage amplification**
- B. Current amplification
- C. Both voltage and current amplification
- D. None of the above

Answer: (A)

20. In a parallel LC circuit, if the signal frequency is decreased below the resonant frequency, then

.....

- A. XL decreases and XC increases**
- B. XL increases and XC decreases
- C. Line current becomes minimum
- D. None of the above

Answer: (A)

21. Q factor of a resonance circuit is given as -----

- A. $Q = R / 2f\pi r$
B. $Q = 2f\pi r L / R$
C. $Q = 2f\pi r C / R$
D. $Q = 2f\pi r / RC$

Answer: (B)

22. The impedance of LC parallel circuit at resonance is given as -----

- A. $Z_r = L/CR$**
B. $Z_r = CR / L$
C. $Z_r = LR/C$
D. $Z_r = R/LC$

Answer: (A)

23. A series or parallel LC circuit resonance occurs when -----

- A. X_L
B. X_C
C. $X_L = X_C$
D. None of the above

Answer: (C)

24. A tuned amplifier is never used in-----

- A. Radio receiver
B. Television receiver
C. Radio transmitter
D. Public address system

Answer: (D)

25. Benefit of tuned circuit is given as -----

- A. $B_w = Q/F_r$
B. $B_w = L F_r / CR$

C. $B_w = Fr/Q$

D. $B_w = CR/fr$

Answer: (C)

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