TRANSISTOR TUNED AMPLIFIERS Questions and Answers pdf :-

1. A tuned amplifier uses ..... load

Resistive
Capacitive
LC tank
Inductive
Ans : 3

2. A tuned amplifier is generally operated in ..... operation

Class A
Class C
Class B
None of the above
Ans : 2

3. A tuned amplifier is used in ..... applications

Radio frequency
Low frequency
Audio frequency
None of the above
Ans : 1

4. Frequencies above ..... kHz are called radio frequencies

2
10
50
200
Ans : 4

5. At series or parallel resonance, the circuit power factor is .....

0
5
1
8
Ans : 3

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

Minimum
Maximum
Half-way between maximum and minimum
Zero
Ans : 2

7. At parallel resonance, the line current is .....

Minimum
Maximum
Quite large
None of the above
Ans : 1

8. At series resonance, the circuit offers ..... impedance

Zero
Maximum
Minimum
None of the above
Ans : 3

9. A resonant circuit contains ..... elements

R and L only
R and C only
Only R
L and C
Ans : 4

10. At series or parallel resonance, the circuit behaves as a ..... load

Capacitive
Resistive
Inductive
None of the above
Ans : 2

11. At series resonance, voltage across L is ..... voltage across C

Equal to but opposite in phase to
Equal to but in phase with
Greater than but in phase with
Less than but in phase with
Ans : 1

12. When either L or C is increased, the resonant frequency of LC circuit .....

Remains the same
Increases
Decreases
Insufficient data
Ans : 3

13. At parallel resonance, the net reactive component circuit current is .....

Capacitive
Zero
Inductive
None of the above
Ans : 2

14. In parallel resonance, the circuit impedance is .....

C/LR
R/LC
CR/L
L/CR
Ans : 4

15. In a parallel LC circuit, if the input signal frequency is increased above resonant frequency then .....

XL increases and XC decreases
XL decreases and XC increases
Both XL and XC increase
Both XL and XC decrease
Ans : 1

16. The Q of an LC circuit is given by .....

2pfr x R
R / 2pfrL
2pfrL / R
R2/2pfrL
Ans : 3

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

Increases
Decreases
Remains the same

Insufficient data
Ans : 2

18. At series resonance, the net reactive component of circuit current is .....

Zero
Inductive
Capacitive
None of the above
Ans : 1

19. The dimensions of L/CR are that of .....

Farad
Henry
Ohm
None of the above
Ans : 3

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

Is decreased
Is increased
Remains the same
None of the above
Ans : 2

21. At series resonance, the phase angle between applied voltage and circuit is .....

900
1800
00
None of the above
Ans : 3

22. At parallel resonance, the ratio L/C is .....

Very large
Zero
Small
None of the above
Ans : 1

23. If the resistance of a tuned circuit is increased, the Q of the circuit .....

Is increased
Is decreased
Remains the same
None of the above
Ans : 2

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

Sensitivity
Fidelity
Selectivity
None of the above
Ans : 3

25. At parallel resonance, the phase angle between the applied voltage and circuit current is .....

900
1800
00
None of the above
Ans : 3

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

XL decreases and XC increases
XL increases and XC decreases
Line current becomes minimum
None of the above
Ans : 1

27. In series resonance, there is .....

Voltage amplification
Current amplification
Both voltage and current amplification
None of the above
Ans : 1

28. The Q of a tuned amplifier is generally .....

Less than 5
Less than 10
More than 10

None of the above
Ans : 3

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

10kHz
40 kHz
30 kHz
20 kHz
Ans : 4

30. In the above question, what are the values of cut-off frequencies?

140 kHz , 60 kHz
1020 kHz , 980 kHz
1030 kHz , 970 kHz
None of the above
Ans : 2

31. For frequencies above the resonant frequency, a parallel LC circuit behaves as a ..... load

Capacitive
Resistive
Inductive
None of the above
Ans : 1

32. In parallel resonance, there is .....

Both voltage and current amplification
Voltage amplifications
Current amplification
None of the above
Ans : 3

33. For frequencies below resonant frequency, a series LC circuit behaves as a ..... load

Resistive
Capacitive
Inductive
None of the above
Ans : 2

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

Loose
Tight
Critical
None of the above
Ans : 1

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

Remains the same
Is lowered
Is raised
None of the above
Ans : 3

36. For frequencies above the resonant frequency , a series LC circuit behaves as a ..... load

Resistive
Inductive
Capacitive
None of the above
Ans : 2

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

IF
Audio
Output
None of the above
Ans : 1

38. A class C amplifier always drives ..... load

A pure resistive
A pure inductive
A pure capacitive
A resonant tank
Ans : 4

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

Low power
High power
Very high power
None of the above
Ans : 4

40. For frequencies below the resonant frequency , a parallel LC circuit behaves as a ..... load

Inductive
Resistive
Capacitive
None of the above
Ans : 1