"Dissemination of Education for Knowledge, Science and Culture"

- Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha's

Vivekanand College, Kolhapur

(Autonomous)

Department of Physics

ICT based CIE

on

B.Sc. III: Internal Examination of Semiconductor Devices and Instrumentation

Conducted by

Dr. M. M. Karanjkar

on

Day: Thursday, Date: 21/01/2021

(2020 – 21)

B.Sc III SEM VI, Examination 2020

[Semiconductor Devices and Instrumentation]
Day: Thursday
Date: 21/01/2021
Total marks: 50.
Solve any 25.

* Indicates required question

1. Email *

2. Name *

3. Seat Number *

4. PRN Number *

5. ….. is an electronic device which is capable to give visual indication of a signal wavefome. *

Mark only one oval.

- CRO
- CRT
- VTVM
- COR

6. The arrangement of the electrodes which produce a focused beam of electrons is called the ..... *

Mark only one oval.

- Electron Gun
- Electron Tube
- electric tube
- electronic gun

7. The inner wall of the CRT is coated with …. material. *

Mark only one oval.

- Zinc chloride
- Phosphor
- Calcium
- florescent

8. The gain of the vertical amplifier can be controlled by the….. *

Mark only one oval.

- calcium
- attenuator
- aquadag
- phosphor

9. The gain of the vertical amplifier is calibrated in terms of ….. *

Mark only one oval.

- Voltage
- current
- potential
- deflection sensitivity

10. A circuit which produces electric oscillations of any desired frequency is known as * …..

Mark only one oval.

- oscillatory circuit
- amplifier
- frequency generator
- Op-amp

11. Tank circuit produces ….. oscillations. *

Mark only one oval.

- damped
- un damped
- sinusoidal
- square

12. In phase shift oscillator, the feedback factor β is ….. *

Mark only one oval.

- 1/20
- 1/29
- 1/25
- 1/10

13. In….. oscillator, two capacitors are placed across a common inductor. *

Mark only one oval.

- Phase shift
- Colpitt's
- Wein-bridge
- crystal

14. ….. oscillators are used in commercial signal generator. *

Mark only one oval.

- Phase shift
- Colpitt's
- Wein-bridge
- crystal

15. ….. type of differential amplifier is commonly used in CE amplifier. *

Mark only one oval.

- Double ended input and output
- Single Double ended input and Double ended output
- Double ended input and Single ended output
- Single ended input and output

16. CMMR stands for…….. *

Mark only one oval.

- Common mode referential ratio
- Common mode reference ratio
- Common mode rejection ratio
- Commercial mode reference ratio

17. Ideal value of CMMR is …..dB. *

Mark only one oval.

- 70
- 80
- 90
- 100

18. The frequency at which the voltage gain equals to 1 is called as……. *

Mark only one oval.

- unit frequency
- average frequency
- standard frequency
- unity gain frequency

19. ……. feedback provides the stabilization of the voltage gain. *

Mark only one oval.

- Negative
- positive
- real
- virtual

20. ……. is a two state circuit that can remain in either state indefinitely. *

Mark only one oval.

- Flip-flop
- Gate
- Counter
- clock

21. ……. is a logic circuit that adds 2 binary digits a time. *

Mark only one oval.

- Full adder
- Half adder
- flip-flop
- gates

22. ……. is a refinement of R-S flip-flop. *

Mark only one oval.

- J-K
- D
- T
- All

23. If all input bits of the number are applied simultaneously in parallel, the adder is called as….. adder. *

Mark only one oval.

- half
- full
- coupled
- parallel

24. ..... is a logic circuit with one or more input signals, but only one output signals. *

Mark only one oval.

- gate
- counter
- number
- flip-flop

25. UJT is has ..... *

Mark only one oval.

- anode, cathode and gate
- two bases and one emitter
- two anodes and one gate
- anode, cathode and two gates

26. ..... is the emitter voltage at the valley point. *

Mark only one oval.

- peak to peak
- valley point voltage
- base voltage
- none

27. ….. is the region where UJT does not receive enough voltage to turn on. *

Mark only one oval.

- cut off
- valley point
- saturation
- all of above.

28. ….. is the region where applied voltage to the emitter increases gradually. *

Mark only one oval.

- cut off
- negative resistance
- saturation
- all of above

29. UJT can be used as ……. *

Mark only one oval.

- amplifier
- rectifier
- sweep generator
- inverter

30. In pinch off region, JFET behaves like a ….. *

Mark only one oval.

- constant voltage source
- constant current source
- voltage drop across channel
- gate reverse bias

31. In a JFET drain current is maximum when VGS is ….. *

Mark only one oval.

- Zero
- negative
- positive
- equal to Vp

32. a ‘V’ shaped opposite polarity material built near a JFET channel center is called the ….. *

Mark only one oval.

- gate
- block
- drain
- heatsink

33. For a JFET the voltage VDS at which ID become essentially constant is the….. *

Mark only one oval.

- pinch-off voltage
- cut-off voltage
- breakdown voltage
- ohmic voltage

34. Which of the following rating appear in the specification sheet for FET *

Mark only one oval.

- voltage between specific terminals
- current level
- power dissipation
- all of above

B.Sc III SEM VI, Examination 2020

11 responses

Publish analytics

Name

11 responses

Mohsin Mull

Shubham Shivanand Mali

Vinay Dilip Shinde

Rutika balasaheb Gangadhare

Patil Amar Shivaji

Kamble Pranav Kamble

Ghadage Kunal Gundopant

BUNE HARSHVARDHAN CHANDARKANT

Shakti Ravindra Chile

Akash Sadashiv Dinde

Sourabh kiran joshi

Seat Number

11 responses

1234

30361

30067

30070

30283

30284

30282

30285

30071

30035

30034

PRN Number

11 responses

122245345

2017059970

2017058839

2017084218

2016024036

2016047926

2016048715

2017094185

2016048809

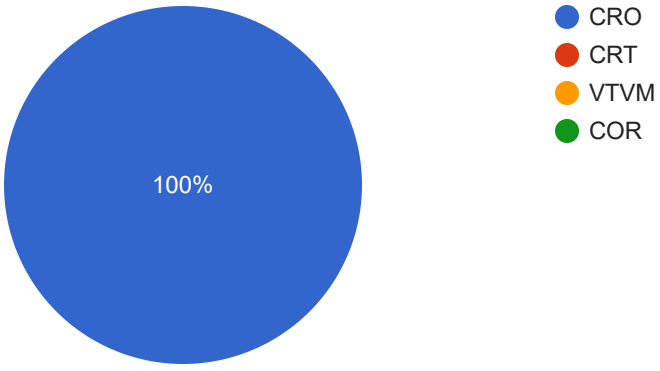
2016048244

2017059593

….. is an electronic device which is capable to give visual indication of a signal wavefome.

Copy

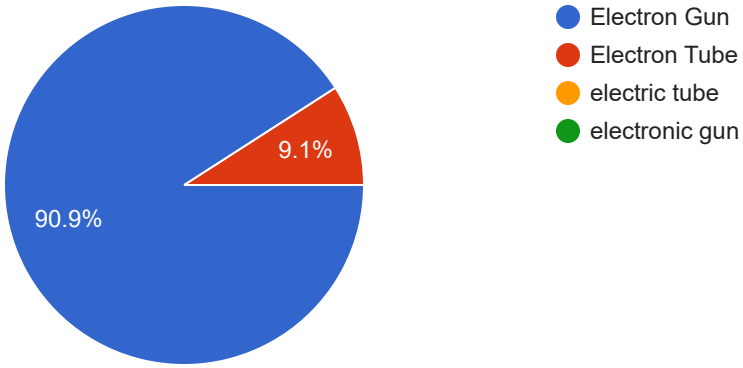
11 responses



The arrangement of the electrodes which produce a focused beam of electrons is called the .....

Copy

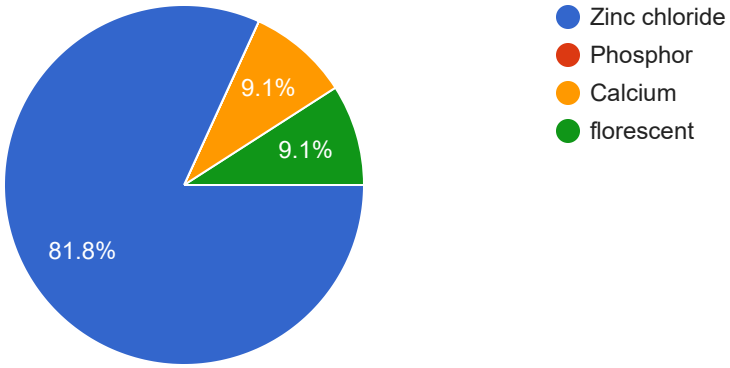
11 responses



The inner wall of the CRT is coated with .... material.

Copy

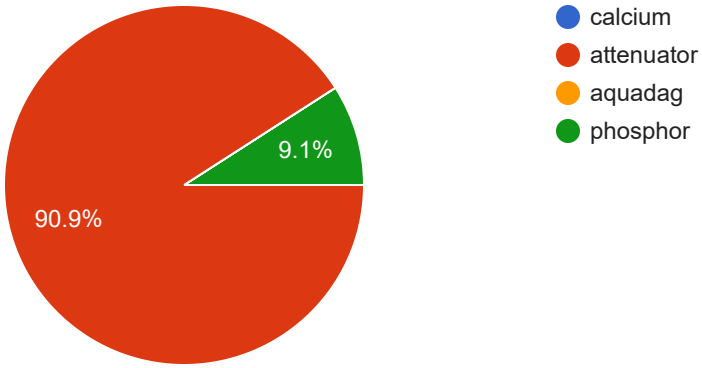
11 responses



The gain of the vertical amplifier can be controlled by the.....

Copy

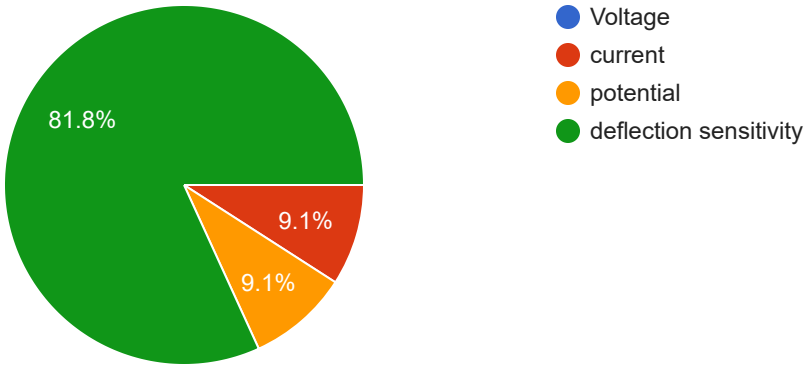
11 responses



The gain of the vertical amplifier is calibrated in terms of …..

Copy

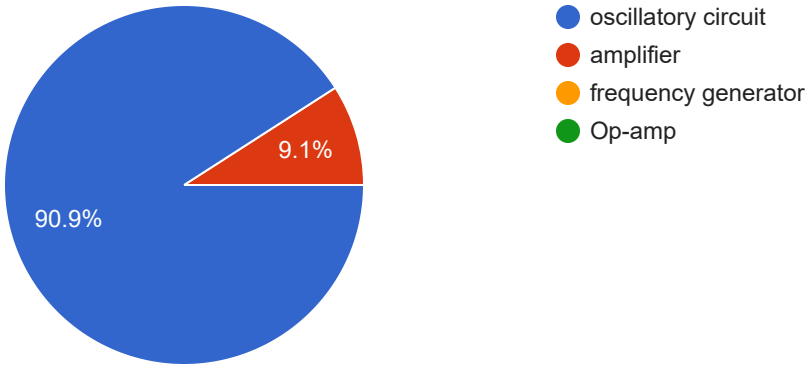
11 responses



A circuit which produces electric oscillations of any desired frequency is known as …..

Copy

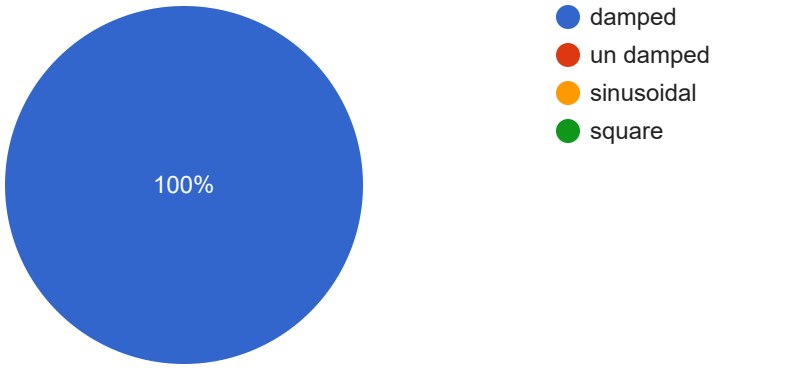
11 responses



Tank circuit produces ….. oscillations.

Copy

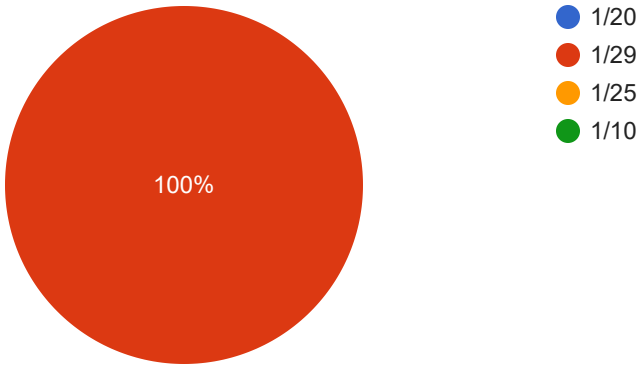
11 responses



In phase shift oscillator, the feedback factor β is .....

Copy

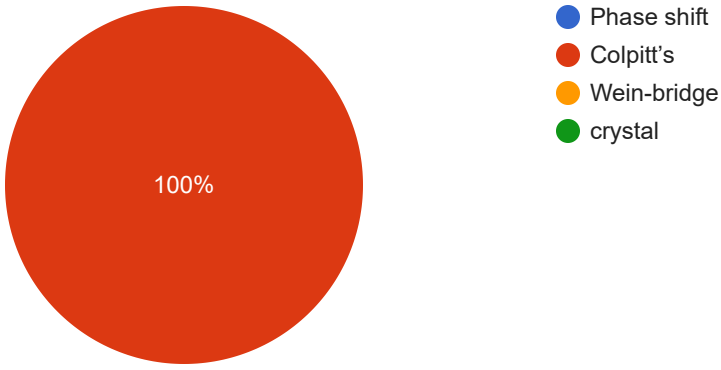
11 responses



In..... oscillator, two capacitors are placed across a common inductor.

Copy

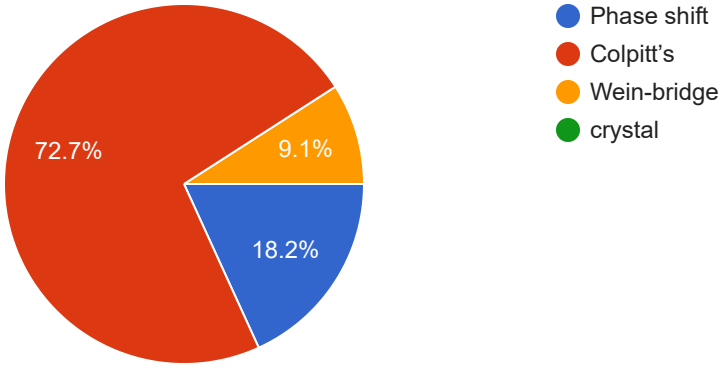
11 responses



..... oscillators are used in commercial signal generator.

Copy

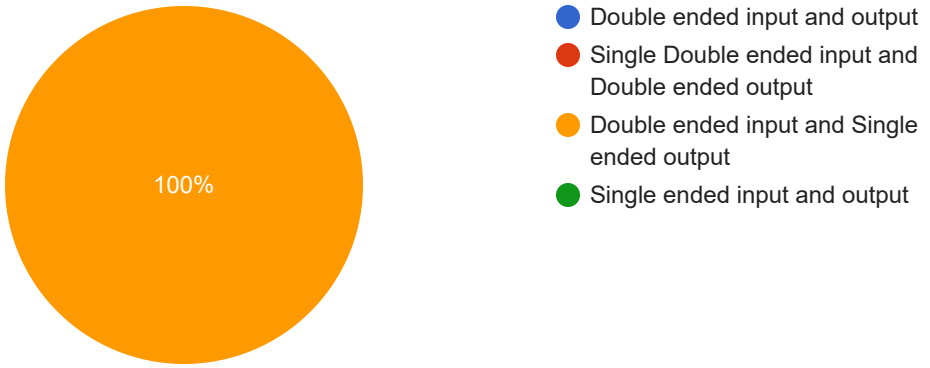
11 responses



….. type of differential amplifier is commonly used in CE amplifier.

Copy

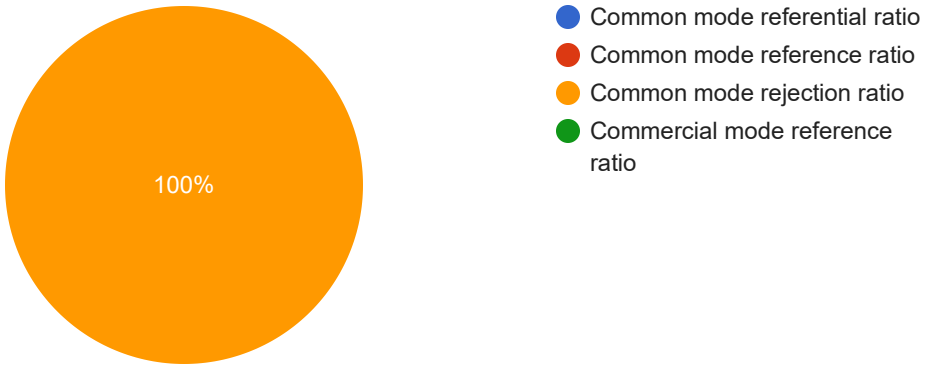
11 responses



CMMR stands for……..

Copy

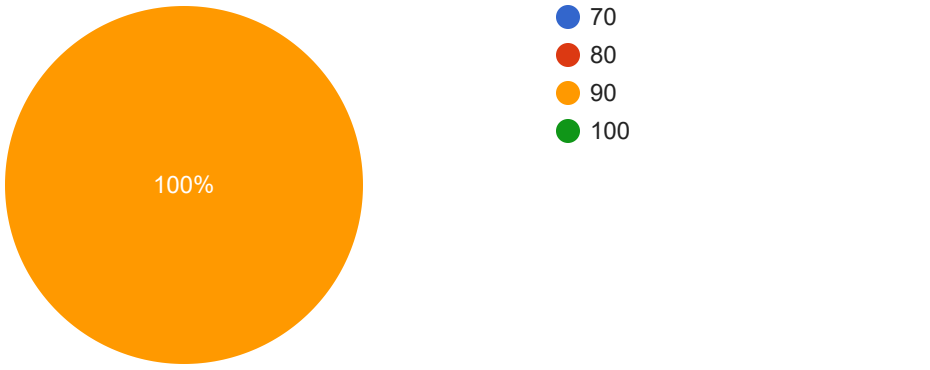
11 responses



Ideal value of CMMR is …..dB.

Copy

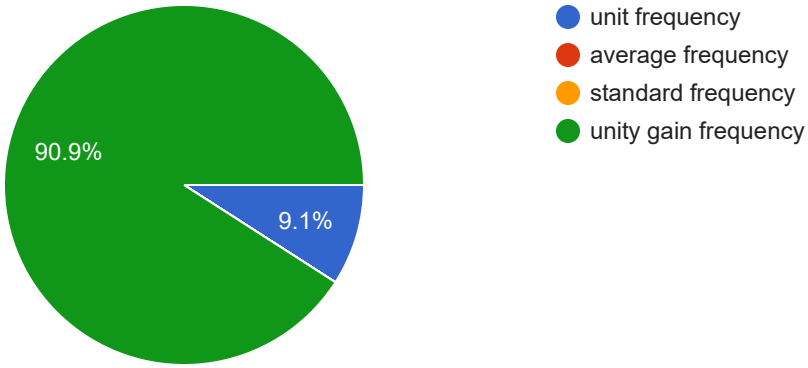
11 responses



The frequency at which the voltage gain equals to 1 is called as…….

Copy

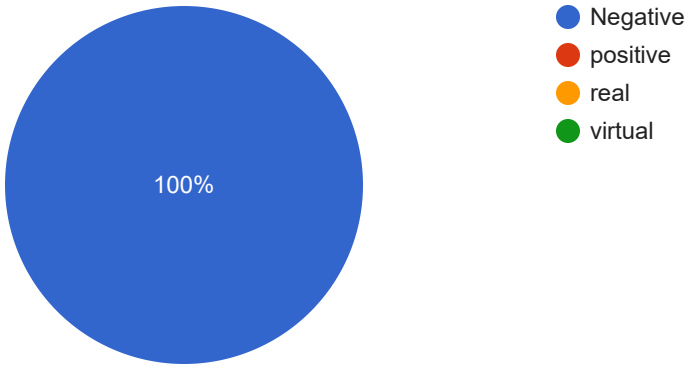
11 responses



……. feedback provides the stabilization of the voltage gain.

Copy

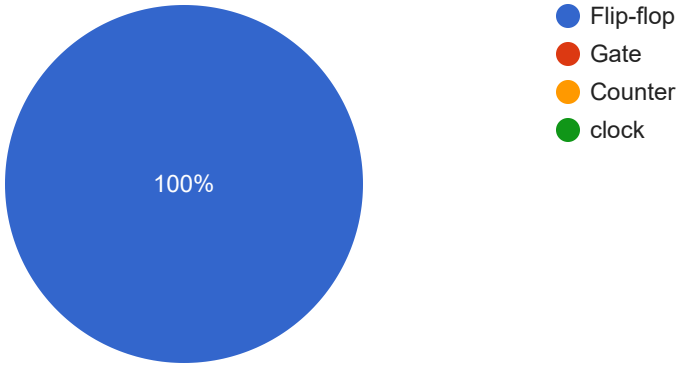
11 responses



……. is a two state circuit that can remain in either state indefinitely.

Copy

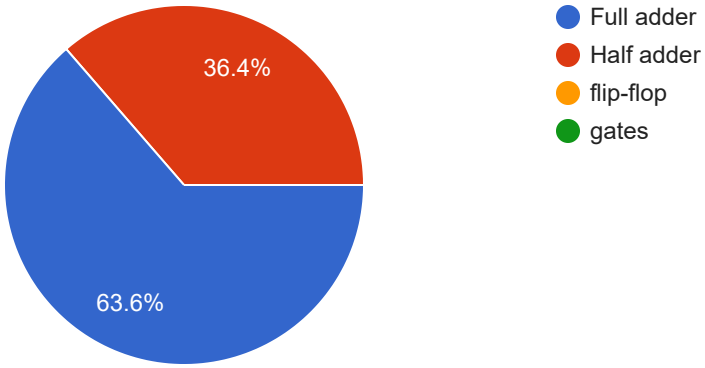
11 responses



……. is a logic circuit that adds 2 binary digits a time.

Copy

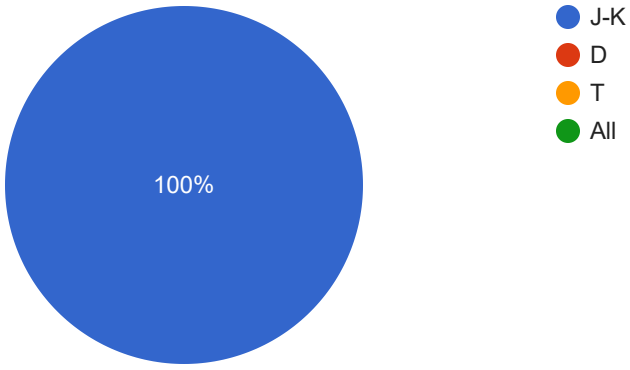
11 responses



……. is a refinement of R-S flip-flop.

Copy

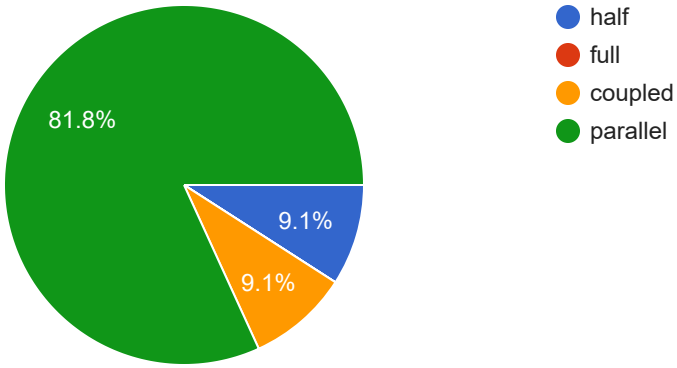
11 responses



If all input bits of the number are applied simultaneously in parallel, the adder is called as….. adder.

Copy

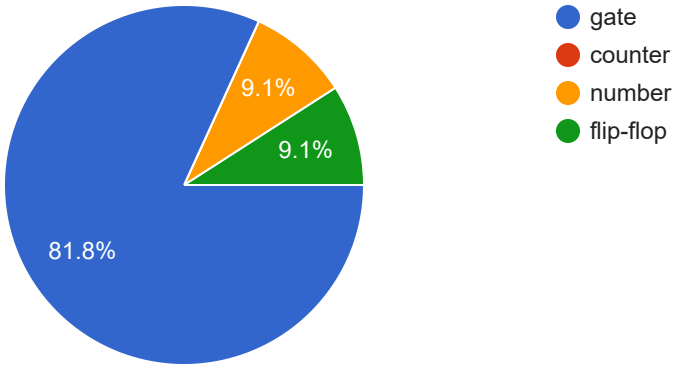
11 responses



..... is a logic circuit with one or more input signals, but only one output signals.

Copy

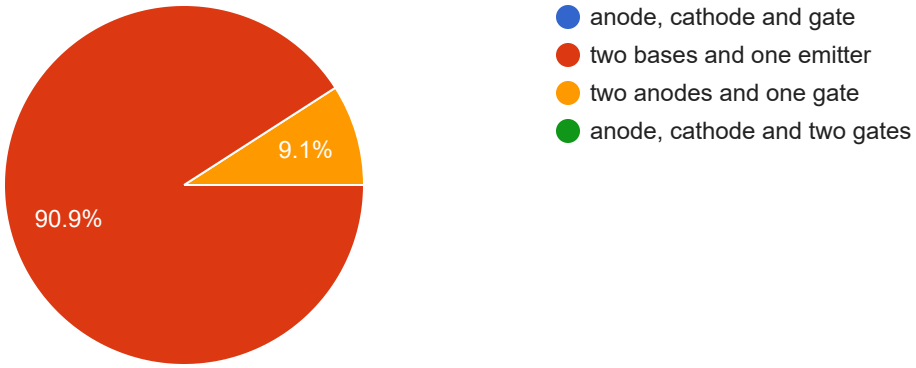
11 responses



UJT is has .....

Copy

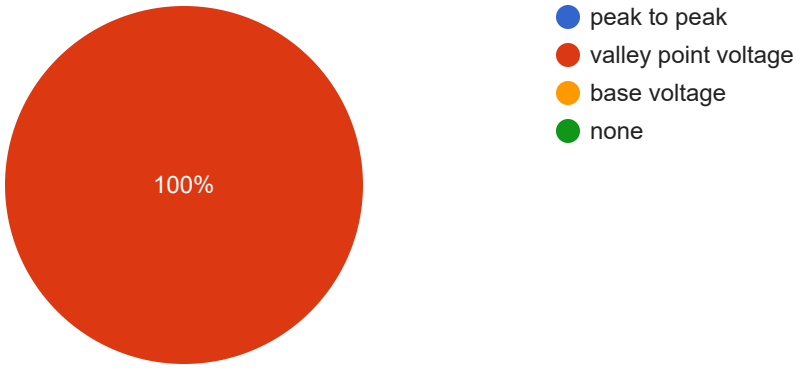
11 responses



..... is the emitter voltage at the valley point.

Copy

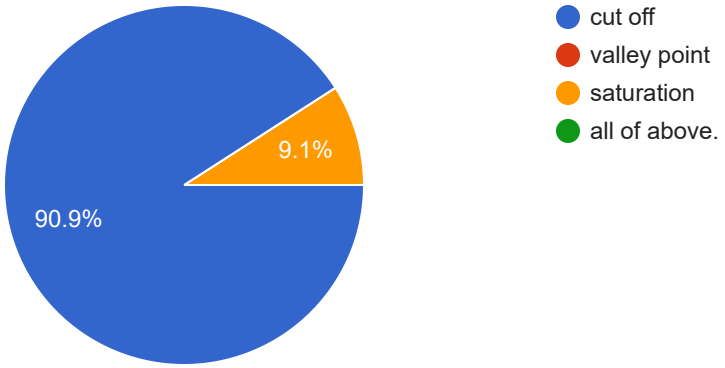
11 responses



..... is the region where UJT does not receive enough voltage to turn on.

Copy

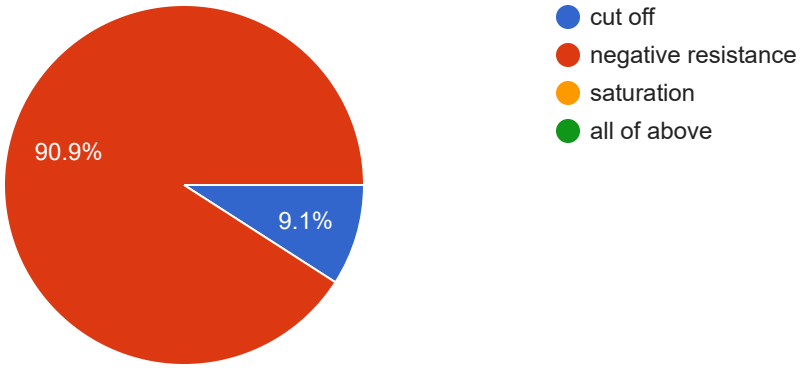
11 responses



..... is the region where applied voltage to the emitter increases gradually.

Copy

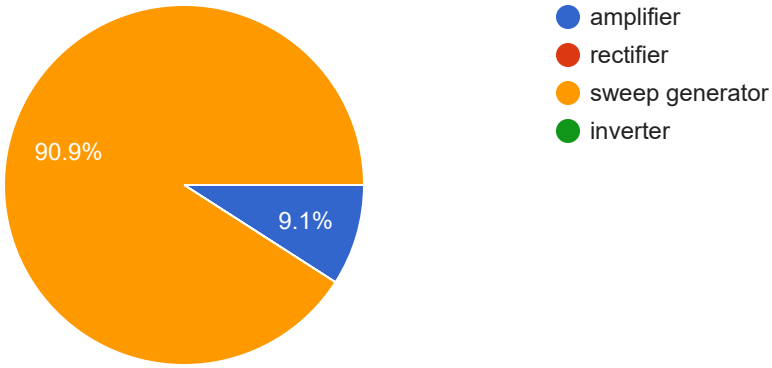
11 responses



UJT can be used as .....

Copy

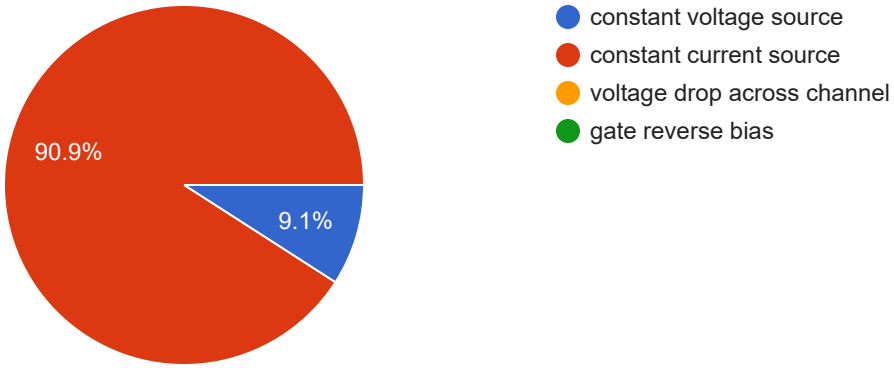
11 responses



In pinch off region, JFET behaves like a .....

Copy

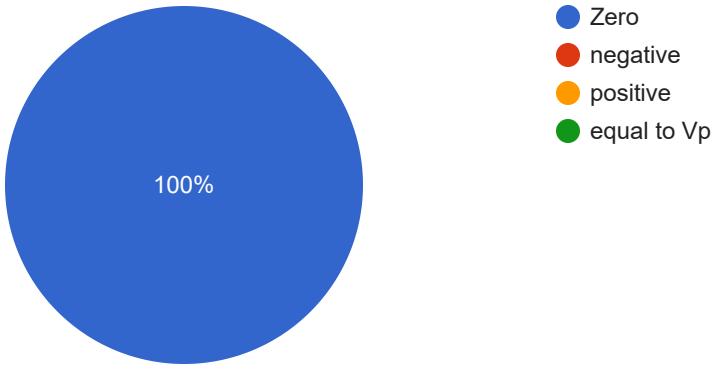
11 responses



In a JFET drain current is maximum when VGS is .....

Copy

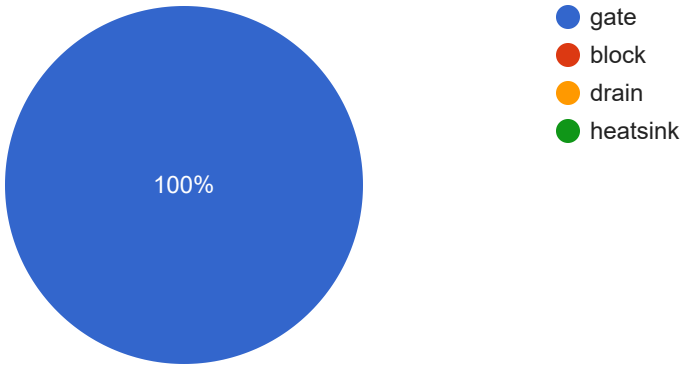
11 responses



a 'V' shaped opposite polarity material built near a JFET channel center is called the .....

Copy

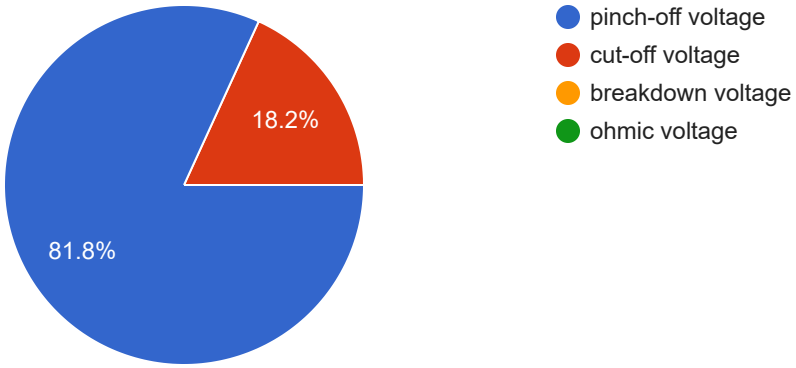
11 responses



For a JFET the voltage VDS at which ID become essentially constant is the…..

Copy

11 responses



Which of the following rating appear in the specification sheet for FET

Copy

11 responses