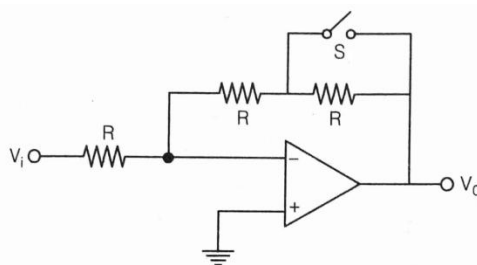


SET B- MCQ- CT1 – UNIT 1

1. Let the magnitude of the gain in the inverting op-amp circuit shown be X with switch S open. When the switch is closed, the magnitude of gain becomes,



- A. $X / 2$
- B. $-X$
- C. $2X$
- D. $-2X$

ANSWER: A

2. Which of the following provides power gain in a transformer coupled class B power amplifier.
- A. Centre tapped transformer.
 - B. Both the transistors.
 - C. Both Centre tapped transformer and transistors
 - D. Upper transistor alone.

ANSWER: C

3. A stable amplifier is one in which
- A. the amplified output signal does not have any oscillation.
 - B. the output amplitude varies according to the input.
 - C. the output current increases rapidly.
 - D. the voltage gain increases rapidly.

ANSWER : A

4. The common mode gain in an operational amplifier should be _____
- A. very high
 - B. very low.
 - C. varying always.
 - D. Controlled.

ANSWER: B

5. The unit for slew rate is _____.

- A. V/Msec
- B. mV / μ sec.
- C. V/ μ sec.
- D. V/ sec

ANSWER: C.

6. In an amplifier, the negative feedback _____.

- A. does not have impact on impedance and bandwidth.
- B. Increases input impedance and bandwidth.
- C. Decreases input impedance and bandwidth.
- D. Increases output impedance.

ANSWER: B

7. Calculate the output offset voltage due to input offset voltage of 0.02V. Assume voltage gain of op amp as 10.

- A. 0.02 V
- B. 0.2V
- C. 2V
- D. 0.002V

Ans: B

8. When the non-inverting terminal of the op amp is fed with 5V and the inverting terminal is fed with 3V as inputs, the output voltage of the op amp is _____.

- A. 2V
- B. 8 V.
- C. 5 V
- D. 15 V.

ANSWER: A

9. The maximum current gain of a BJT transistor is obtained when the Q point is lying on the _____ of the DC load line.

- A. central portion
- B. upper portion
- C. lower portion
- D. cut off region

ANSWER: B

10. Determine the current gain of a BJT with collector current and base current being 0.95mA and 50 μ A respectively.

- A. 0.95
- B. 50
- C. 19
- D. 0.05

ANSWER:A

11. The current in the _____ region will be more in a CE configured BJT.

- A. Collector
- B. Base
- C. Drain
- D. Emitter

ANSWER:D

12. In order to operate the transistor in safe operating area, _____.

- A. both the input and output regions are forward biased.
- B. both the input and output regions are reverse biased.
- C. emitter region is forward biased and collector region is reverse biased.
- D. Only supply voltage is given.

ANSWER: C.

13. In an n channel JFET, the I_{DS} varies when

- A. the gate-source voltage and drain current increases .
- B. the gate-source voltage and drain current decreases .
- C. the gate-source voltage decreases and drain current does not vary .
- D. the gate-source voltage increases and drain current does not vary .

ANSWER: B

14. JFET is a _____ device.

- A. Unipolar
- B. Bipolar.
- C. Bidirectional
- D. Unijunction

ANSWER: A

15. The input resistance of JFET is _____ BJT.

- A. Less than
- B. More than
- C. Equal to
- D. Always varying than that of

ANSWER: B

16. Tuned amplifiers belong to

- A. Class A.
- B. Class B.
- C. Class C
- D. Class AB.

ANSWER: C

17. _____ coupling improves the overall efficiency of power amplifiers.

- A. RC
- B. Impedance
- C. Transformer
- D. Resistive

ANSWER: C

18. The voltage gain of an amplifier _____ when a negative feedback is applied to it.

- A. increases twice
- B. increases thrice
- C. reduces
- D. remains constant.

ANSWER: C

19. The IC 555 Timer is a _____ pin structured

- A. 8
- B. 6
- C. 12
- D. 10

ANSWER: A

20. An oscillator is one in which _____ input signal is fed in.

- A. Sinusoidal
- B. Square
- C. No
- D. Pulsating

ANSWER: C

21. _____ is the ratio of active conducting period of the switch to the total on and off times of the switch.

- A. Duty cycle
- B. Reactive cycle
- C. Active cycle
- D. Delay cycl

ANSWER:A

22. Which of the following statement is true in UJT?

- A. The valley point voltage and peak point voltage are equal.
- B. The valley point voltage is greater than peak point voltage.
- C. The valley point voltage is lesser than peak point voltage.
- D. The valley point voltage lies in the third quadrant when UJT is operated.

ANSWER: C

23. _____ is commonly used to generate pulses in relaxation oscillator.

- A. UJT
- B. BJT.
- C. JFET.
- D. Op- amp

ANSWER: A

24. _____ is stabilized in a current shunt feedback amplifier.

- A. Impedance
- B. Admittance
- C. Current gain
- D. Voltage gain

ANSWER: C

25. _____ feedback is applied to oscillators.

- A. No
- B. Negative
- C. Positive
- D. Forward

ANSWER: C.