

ELECTRONICS PAPER II  
SECOND UNIT TEST QUESTION BANK

Q. Fill in the blanks.

1. An Amplifier circuit of voltage gain 100 gives 10V output, the value of input voltage is

- a. 1000 V
- b. 100 mV
- c. 10 V
- d. 10 mV

2. In an amplifier, the signal handling capacity will be high when the operating point is selected -

At the extremities of the active region

- b. Close to cut-off region
- c. Close to saturation
- d. In the middle of the active region

3. Negative feedback in an amplifier \_\_\_\_\_

- a. reduce gain
- b. increases frequency and phase distortions
- c. reduces bandwidth
- d. increases noise.

4. When amplifiers are cascaded

- a. The gain of each amplifier is increased
- b. lower supply voltage is required
- c. The overall gain is increased
- d. Each amplifier has to work less.

5. A single stage transistor amplifier contains ..... and associated circuitry

- a. Two transistors

- b. One transistor
  - c. Three transistor
  - d. None of the above
6. The input capacitor in an amplifier is the ..... capacitor
- a. Coupling
  - b. bypass
  - c. Leakage
  - d. None of the above
7. The purpose of capacitors in a transistor amplifier is to .....
- a. Protect the transistor
  - b. Cool the transistor
  - c. Couple or bypass a.c. component
  - d. Provide biasing
8. The purpose of a coupling capacitor in a transistor amplifier is to .....
- a. Increase the output impedance of transistor
  - b. Protect the transistor
  - c. Pass a.c. and block d.c.
  - d. Provide biasing

Q. Answer the following questions.

1. Explain single stage amplifier with necessary diagram.
2. What is need of bias stabilization.
3. Explain fixed bias with necessary diagrams.
4. Explain in short the multi stage amplifiers.
5. Derive the expression for gain of an amplifier with feedback.
6. Explain the voltage divider biasing with necessary diagrams.
7. Explain single stage amplifier with necessary diagram.
8. Name the different biasing circuits and draw circuit diagram of each.

9. Write a note on BCD number system.
10. Explain the double dabble method of converting decimal number to its binary equivalent.
11. Explain conversions of Binary to decimal, decimal to hexadecimal, hexadecimal to binary and decimal. (Different conversions will be given as taught in the class)
12. What is ones and two's complement of a binary number. Give examples.
13. Explain binary subtraction using ones and two's complement method with examples for both positive and negative results.