Class 12 Physics Chapter 14 Semiconductor Materials MCQs

1. What bonds are present in a semiconductor?

(a) Monovalent
(b) Bivalent
(c) Trivalent
(d) Covalent

2. The number of electrons in the valence shell of a semiconductor is

(a) 1
(b) 2
(c) 3
(d) 4

3. What happens to the forbidden energy gap of a semiconductor with the fall of temperature?

(a) Decreases
(b) Increases
(c) Unchanged
(d) Sometimes decreases and sometimes increases

4. In a P-type semiconductor, the current conduction is due to

(a) Holes
(b) Atoms
(c) Electrons
(d) Protons

5. What is the main function of a transistor?

(a) Simplify
(b) Amplify
(c) Rectify
(d) All of the above

6. In a semiconductor, what is responsible for conduction?

(a) Electrons only
(b) Holes only
(c) Both electrons and holes
(d) Neither electrons nor holes

7. What happens to the resistance of semiconductors on heating?

(a) Increases
(b) Decreases
(c) Remains the same
(d) First increases later decrease

8. In intrinsic semiconductors at room temperature, the number of electrons and holes are

(a) Unequal
(b) Equal
(c) Infinite
(d) Zero

9. Which of the following is not a universal gate?

(a) NOT
(b) AND
(c) OR
(d) NAND

10. A p-type semiconductor is

(a) Positively charged
(b) Negatively charged
(c) Uncharged
(d) None of the above

**********Answer Key **********

1-(d)	2-(d)	3-(c)	4-(a)	5-(b)
6-(c)	7-(b)	8-(b)	9-(d)	10-(a)