# Semiconductor - Semiconductor objective questions and answers

- 1. Intrinsic semiconductors are those
  - A. Which are made of semiconductor material in its purest form
  - B. Which have zero energy gap
  - C. Which have more electrons than holes
  - D. Which are available locally

## √ View Answer

A. Which are made of semiconductor material in its purest form

## Your Comments

- 2. Intrinsic semiconductor at room temperature will have, ...... available for conduction
  - A. Electrons
  - B. Holes
  - C. Both electrons and holes
  - D. None of the above

### √ View Answer

C.Both electrons and holes

## Your Comments

- 3. A pure semiconductor behaves like an insulator at 0<sup>0</sup> K because
  - A. There is no recombination of electrons with holes
  - B. Drift velocity of free electrons is very small
  - C. Free electrons are not available for current conduction
  - D. Energy possessed by electrons at that low temperature is almost zero

#### √ View Answer

C.Free electrons are not available for current conduction

## Your Comments

- 4. Which of the following is a semi-conductor
  - A. Diamond
  - B. Arsenic
  - C. Phosphorous

D. Gallium arsenide

## √ View Answer

D.Gallium arsenide

# Your Comments

- 5. The energy gap is much more in silicon than in germanium because
  - A. It has less number of electrons
  - B. It has high atomic mass number
  - C. Its crystal has much stronger bonds called ionic bonds
  - D. Its valence electrons are more tightly bound to their parent nuclii

## √ View Answer

D.Its valence electrons are more tightly bound to their parent nuclii