



Shri Shivaji Education Society's
Shri Pundlik Maharaj Mahavidyalaya Nandura (Rly.)
Department of Physics
Class: B.Sc. III Sem VI



Choose the correct Alternative

1. The co-ordination number of simple cubic structure is
 - 6.
 - 8.
 - 12.
 - 16.

2. When the plane is parallel to any crystallographic axis, its intercept on that axis is taken as
 - Zero.
 - Infinity.
 - One.
 - None of these.

3. Common name for Schottky defect and Frankel defect is
 - Point defect.
 - Line defect.
 - Plane defect.
 - None of these.

4. Grain boundaries is a crystal defect under the heading of
 - Point defect.
 - Line defect.
 - Plane defect.
 - None of these.

5. Miller indices are denoted by
 - $1/h, 1/k, 1/l$.
 - (h, k, l) .
 - h^2, k^2, l^2 .
 - x, y, z .

6. Electrical conductivity depends on the
 - Number of bound electrons in atom.
 - Number of free electrons in a metal.
 - Shape of the conductor.

- Number of energy bands in a conductor.
7. According to band theory of solids the potential of an electron in a crystal is
- Constant.
 - Zero.
 - Periodic.
 - None of these.
8. Vector form of ohm's law is
- $j = \sigma E$.
 - $I = \frac{R}{V}$.
 - $E = \sigma j$.
 - $R = VI$.
9. Dipole moment of current loop does not depends on
- Area of the loop.
 - Shape of the loop.
 - Current in the loop.
 - Turns of the loop.
10. Meissner effect is only the characteristic of
- Conductor.
 - Insulator.
 - Semiconductor.
 - Superconductor.
11. Spin angular momentum of electron is
- \hbar .
 - $1/2 \hbar$.
 - Zero.
 - $3/2 \hbar$.
12. Particle which obey F-D statistics are called as
- Orbital motion of electron in atom.
 - Spin motion of electron in atom.
 - Both orbital and spin motion in atom.
 - None of these.
13. Diamagnetic susceptibilities are
- Negative and small.
 - Positive and small.
 - Positive and very large.
 - None of these.

14. The thermodynamic probability of the system in equilibrium is

- Maximum.
- Minimum but not 1.
- One.
- Zero.

15. Smallest volume of unit cell in phase space is

- Minimum.
- Maximum.
- Zero.
- None of these.

16. The co-ordination number of bcc structure is

- 6.
- 10.
- 8.
- 16.

17. Speed of molecule is inversely proportional to

- Mass.
- Temperature.
- Density.
- Viscosity.

18. Which of the following in Classical Statistic

- M-B Statistic.
- B-E Statistic.
- F-D Statistic.
- None of these.

19. Photons are

- Fermions.
- Bosons.
- Charged particles.
- None of these.

20. Speed of molecule is inversely proportional to

- Mass.
- Temperature.
- Density.
- Viscosity.