

ECAT Pre General Science Physics Chapter 17 Physics of Solids

| Sr | Questions | Answers Choice |
|----|---|---|
| 1 | The SI unit of stress is | A. N/m^2 B. Nm C. dynes/m D. N |
| 2 | The bands below the valence band are | A. completely filled and play active part in conduction process B. completely filled and plays no part in conduction process C. completely filled and play active part in conduction process D. not completely filled and play no part in conduction process |
| 3 | Substances which break just after the elastic limit is reached, are known as | A. brittle substances B. ductile substances C. plastic substances D. elastic substances |
| 4 | The modulus of elasticity can be written as | A. stress x strain B. strain/stress C. $1/2 \times$ stress x strain D. stress/strain |
| 5 | The curie temperature of iron is about | A. $250^\circ C$ B. $500^\circ C$ C. $750^\circ C$ D. $1000^\circ C$ |
| 6 | In a cubic crystal, All solids meet at: | A. 60° B. 90° C. 109° D. 30° E. 10° |
| 7 | In a semi-conductor material, current flows due to | A. positive charge B. negative charge C. both of them D. none of them |
| 8 | A semi-conductor in its extremely pure form is known as | A. extrinsic semi-conductor B. intrinsic semi-conductor C. either of them D. none of them |
| 9 | When a large number of atoms are brought close to one another to form a solid, each energy level of an isolated atom splits into sub-levels, called | A. energy bands B. energy shells C. states D. all of them |
| 10 | The materials in which valence electrons are bound very tightly to their atoms and are not free, are known as | A. conductors B. insulators C. semi-conductors D. all of them |
| 11 | The substances in which, atom are so oriented that their fields support each other and the atoms behave like tiny magnets, are called | A. diamagnetic substances B. ferromagnetic substances C. paramagnetic substances D. all of them |
| 12 | The crystalline structure of NaCl is | A. rectangular B. hexagonal C. tetrahedral D. cubical |
| 13 | Ferromagnetic substances lose their magnetism when heated above a certain temperature, | A. critical temperature B. curie temperature |

known as

- C. high temperature
- D. fixed temperature

14 When the shear stress and shear strain are involved, then their ratio is called

- A. Young's modulus
- B. Bulk modulus
- C. Shear modulus
- D. all of them

15 If the stress increased beyond the elastic limit of the material. the deformation produced in the material will be

- A. permanent
- B. temporary
- C. either of them
- D. none of them

16 The domains are of macroscopic size of the order of

- A. centimeters
- B. meters
- C. millimeters
- D. nanometers

17 The ratio of linear stress/linear strain is called as

- A. Yong's modulus
- B. Bulk modulus
- C. Shear modulus
- D. Modulus

18 In metallic crystals which of the following thing remains constant

- A. amplitude of oscillations
- B. temperature of solid
- C. average atomic positions
- D. all of them

19 When relatively simple molecules are chemically combined into massive molecules, the reaction is called:

- A. Fission reaction
- B. Fusion reaction
- C. Polymerization
- D. Any of these
- E. None of these

20 The word amorphous means:

- A. Without any structure
- B. With definite structure
- C. Regular arrangement of molecules
- D. Both (B) and (C)
- E. None of these