ECAT Pre General Science Physics Chapter 17 Physics of Solids Online Test

Sr	Questions	Answers Choice
1	In the doping process, the ratio of the doping atoms to the semi conductor atom is	A. 1 to 10 B. 1 to 10^3 C. 1 to 10^6 D. 1 to 10^9
2	When small number of atoms from some other suitable element is added to the semi-conductor material, then this process is known as	A. impurification B. adding C. doping D. extrinsivity
3	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
4	The materials in which there are plenty of free electrons for electrical conduction are known as	A. conductors B. insulators C. semi-conductors D. all of them
5	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
6	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
7	The conduction band in a solid	A. may be empty B. cannot be empty C. should be filed D. all of them
8	The electrons occupying the conduction band are known as	A. conduction electrons B. free electrons C. both of them D. none of them
9	The band above the valence band is called	A. high energy band B. conduction band C. empty band D. none of them
10	The valence band of an atom in a solid	A. is always empty B. may or may not be empty C. can never be empty D. none of them
11	The electrons in the outermost shell of an atom are called	A. core electrons B. valence electrons C. high energy electrons D. none of them
12	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
13	Electrons of an isolated atom are bound to the nucleus, and	A. can only have distinct energy level B. can only have same energy level C. may or may not have distinct energy levels D. none of these
14	Which of the following theory completely explain the three types of materials	A. Bohr model of electron distribution B. Rutherford atomic model C. Pauli's exclusion principle D. energy band theory

15	Lead, copper and wrought iron are examples of	A. brittle substances B. ductile substances C. plastic substances D. elastic substances
16	Glass and high carbon steel are the examples of	A. brittle substances B. ductile substances C. plastic substances D. elastic substances
17	The 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
18	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
19	The maximum stress that a material can withstand, is known as	A. plastic point B. elastic limit C. yield point D. ultimate tensile strength
20	when the deformation produced in the material become permanent, this type of behaviour is called	A. proportionality B. elasticity C. plasticity D. none of them
21	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
22	Under the elastic region, the deformation produced in the material, the deformation produced in the material will be	A. permanent B. temporary C. either of them D. none of them
23	The greatest stress that a material can endure without losing the proportionality between stress and strain is called	A. plastic line B. breaking point C. proportional limit D. none of them
24	In the stress-strain graph, stress is increased linearly with strain until a point is reached, this point is known as	A. plastic limit B. plastic deformation C. proportional limit D. elastic behaviour
25	The number of different crystals systems based on the geometrical arrangement of their atoms and the resultant geometrical structure are	A. 5 B. 7 C. 9 D. 14
26	When the shear stress and shear stain are involved, then their ratio is called	A. Young's modulus B. Bulk modulus C. Shear modulus D. all of them
27	In case of the three dimensional deformation, when volume is involved, the ratio of applied stress to volumetric strain is called	A. Young's modulus B. Bulk modulus C. Shear modulus D. all of them
28	The ratio of shearing stress/shearing strain is called as	A. Modulus B. Pascal modulus C. Hooker's modulus D. Shear modulus
29	The ratio of linear stress/linear strain is called as	A. Yong's modulus B. Bulk modulus C. Shear modulus D. Modulus
30	The units of modulus of elasticity are	A. Nm^{-2} B. Nm C. ms^{-1} D. Pascal