

## ECAT Physics Chapter 17 Physics of Solids

Sr	Questions	Answers Choice
1	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
2	The smallest three dimensional basic structure in a crystalline solid is called	A. lattice point B. crystal lattice C. cubic crystal D. unit cell
3	The first super conductor was discovered in	A. 1811 B. 1890 C. 1901 D. 1911
4	The magnetism produced by electrons within an atom can arise from	A. electrons orbiting the nucleus B. electrons posses a spin C. both motions D. none of these motions
5	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
6	The molecules or ions in a crystalline solids are	A. static B. not static C. randomly moving D. all of them
7	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
8	The substance in which atoms are so oriented that the field produced by spin and orbital motion of the electrons might add up to zero,are called	A. diamagnetic substances B. ferromagnetic substances C. paramagnetic substances D. all of them
9	When small number of atoms from some other suitable element is added to the semiconductor material, then this process is known as	A. impurification B. adding C. doping D. extrinsivity
10	A unit cell is smallest basic structure which is:	A. One dimensional B. Two dimensional C. Three dimensional D. Four dimensional E. None of these
11	In a cubic crystal, All solids meet at:	A. $60^\circ$ B. $90^\circ$ C. $109^\circ$ D. $30^\circ$ E. $10^\circ$
12	In the phenomenon of hysteresis	A. magnetism leads the magnetising current B. magnetism lags behind the magnetising current C. magnetism goes along the magnetising current D. none of them
13	The critical temperature of tin is	A. 1.18 K B. 4.2 K C. 3.72 K D. 7.2 K
14	Substances which break just after the elastic limit is reached, are known as	A. brittle substances B. ductile substances C. plastic substances

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15 The electrons occupying the conduction band are known as

A. conduction electrons  
B. free electrons  
**C. both of them**  
D. none of them

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16 The SI unit of stress is

A.  $N/m^2$   
B. Nmc  
C. dynes/m  
D. N

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17 The conduction band in a solid

A. may be empty  
B. cannot be empty  
C. should be filled  
D. all of them

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18 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

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19 Examples of polymeric substances are:

A. Plastic  
B. Synthetic rubbers  
C. Zirconia  
D. All of these  
**E. Both (A) and (B)**

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20 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

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