Physics ECAT Pre Engineering Online Test

Sr	Questions	Answers Choice
1	The critical temperature of aluminium is	A. 1.18 K B. 4.2 K C. 3.72 K D. 7.2 K
2	The critical temperature of mercury is	A. 1.18 K B. 4.2 K C. 3.72 K D. 7.2 K
3	The first super conductor was discovered in	A. 1811 B. 1890 C. 1901 D. 1911
4	There are some whose resistivity becomes zero below a certain temperature, called	A. absolute zero B. 0°C C. critical temperature D. lower fixed point
5	In a semi-conductor material, the total current is	A. only the +ve current B. only the electronic current C. sum of +ve and electronic current D. all of them
6	In a semi-conductor material, current flows due to	A. positive charge B. negative charge C. both of them D. none of them
7	Whenever a covalent bond is broken in an intrinsic semi-conductor	A. hole is created B. an electron is created C. an electron-hole pair is generated D. all of them
8	When a silicon crystal is doped with a pentavalent element, then the atom of the pentavalent element is known as	A. acceptor B. donor C. either of them D. none of them
9	When a silicon crystal is doped with a pentavalent element, such an extrinsic semi-conductor is called	A. p-type semi-conductor B. n-type semi-conductor C. either of them D. none of them
10	Arsenic, antimony and phosphorus are the elements from	A. third group B. fourth group C. fifth group D. none of them
11	The bonding between the semi-conductor materials is	A. covalent B. ionic C. either of them D. none of them
12	Semi-conductor elements have atoms with	A. 2 valence electrons B. 3 valence electrons C. 4 valence electrons D. 5 valence electrons
13	The doped semi-conductor materials are known as	A. intrinsic semi-conductor B. extrinsic semi-conductor C. either of them D. none of them
14	In the doping process, the ratio of the doping atoms to the semi conductor atom is	A. 1 to 10 B. 1 to 10³ C. 1 to 10⁶ D. 1 to 10⁹
15	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
16	Which type of wave can be set up in solids	A. longitudinal waves B. transverse waves C. both of them D. none of them
17	The waves in which the particles of the medium have displacement along the direction of propagation of waves are called	A. longitudinal waves B. transverse waves C. non-mechanical waves D. none of them
18	The waves in which the particles of the medium are displaced in a direction perpendicular to the direction of propagation of waves are known as	A. longitudinal waves B. transverse waves C. non-mechanical waves D. none of them
19	Example of progressive wave is	A. transverse waves B. longitudinal waves C. both of them D. none of them
20	A wave, which transfer energy by moving away from the source of disturbance is called a	A. progressive wave B. travelling wave C. both of them D. none of them
21	In case of mechanical waves, we study the motion of	A. a single particle B. collection of particle C. any one of them D. none of them
22	The example of mechanical wave is	A. waves in ropes B. waves on water surface C. waves in air D. all of them
23	The waves which propagate out in space due to oscillation of electric and magnetic fields are known as	A. e.m. waves B. mechanical waves C. sound waves D. water waves
24	The waves which propagate by the collision of material particles are known as	A. e.m. waves B. mechanical waves C. light waves D. microwaves
25	Wave disturbances may also come in a concentrated bundle, like shock wave from an aeroplane flying at	A. subsonic speed B. sonic speed C. super sonic speed D. any one of them
26	Waves transport energy	A. without transport energy B. with matter C. both of them D. none of them
27	A weakly damped system has fairly	A. sharp resonance curve B. flat resonance curve C. both of them D. none of them
28	A heavily damped system has a fairly	A. sharp resonance curve B. flat resonance curve C. both of them D. none of them
29	Smaller the damping, the resonance will be	A. more flat B. more sharp C. both of them D. none of them
30	Smaller the damping, greater will be the	A. frequency B. wavelength C. amplitude D. none of them