

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The temperature scale approved in SI units is:	A. Celsius scale B. Kelvin scale C. Fehrenheit scale D. None of these
2	Two bodies of masses 1 kg and 5 kg are dropped gently from the top of a tower. At a point 20 cm from the ground both the bodies will have the same	A. Momentum B. Kinetic energy C. Velocity D. Total energy
3	When a charged particle passes through matter, it produces ionization, this effect is used in	A. fission reaction B. reactor C. radiation detector D. fusion reaction
4	Instead of moving the coil towards a magnet, the magnet is moved towards the coil with the same speed. The galvanometer shows current	A. Of same magnitude in the same direction B. Of different magnitude in the same direction C. Of same magnitude but in opposite direction D. Of different magnitude in the opposite direction E. None of these
5	Nowadays, Most of the electric energy is produced by the A.C. generators using:	A. Hydal water B. Geothermal energy C. Solar energy D. Biomass E. Both (B) and (D)
6	The galvanometer constant of a moving coil galvanometer is given by	A. $K = BAN/C$ B. $K = BN/CA$ C. $K = NAC/B$ D. $K = C/BAN$
7	In metallic crystals which of the following things remains constant	A. amplitude of oscillations B. temperature of solid C. average atomic positions D. all of them
8	Newton published laws of motion in his famous book "principia" in	A. 1867 B. 1667 C. 1676 D. 1687
9	SI units of time period is	A. second B. hertz C. revolution D. vibration/sec
10	When the waveform of one voltage is increasing and that of the second is decreasing and vice versa, then phase difference between these voltages is	A. 90° B. 75° C. 0° D. 180°
11	The drag force acting on a spherical droplet of radius 10^{-5} m moving with a velocity of 1 cm/sec in a fluid of viscosity 5.31×10^{-7} m/sec. The units come out to be:	A. 10^{-16} N B. 10^{-14} N C. 10^{-12} N D. 10^{-10} N
12	The number of vibrating body at any instant from its equilibrium position is called	A. displacement B. frequency C. amplitude D. time period
		A. a single particle

13	In case of mechanical waves, we study the motion of	<p>B. collection of particle</p> <p>C. any one of them</p> <p>D. none of them</p>
14	An electric field is generated along the wire when:	<p>A. Its resistance is very high</p> <p>B. A constant potential is maintained across the wire</p> <p>C. Net current through the wire is zero</p> <p>D. A constant potential difference is maintained across the wire</p> <p>E. Either (A) or (D)</p>
15	A prism splits a beam of white light into seven component colors. This is so because	<p>A. Phase of different colors is different</p> <p>B. Amplitude of different colors is different</p> <p>C. Wavelength of different colors is different</p> <p>D. Velocity of different colors is different</p>
16	Thermocouple is an arrangement of two different metals	<p>A. To convert heat energy in to electrical energy</p> <p>B. To produce more heat</p> <p>C. To convert heat energy into chemical energy</p> <p>D. To convert electric energy in to heat energy</p>
17	Work-energy principle states that work done on the body by applied force is equal to change in:	<p>A. Potential energy</p> <p>B. Kinetic energy</p> <p>C. Linear momentum</p> <p>D. None of these</p>
18	The resultant of two velocities 3 m/sec and 400 cm/sec making an angle 90° with each other is:	<p>A. 20 m/sec</p> <p>B. 5 m/sec</p> <p>C. 3 m.sec</p> <p>D. None of these</p>
19	A solenoid is a coil of wire which is:	<p>A. Short, loosely wound, cylindrical</p> <p>B. Long, tightly wound, spherical</p> <p>C. Long, loosely wound, cylindrical</p> <p>D. Long, loosely wound, cylindrical</p>

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cylindrical<o:p></o:p>
</p>

E. <p class="MsoNormal" style="text-align:justify">None of these<o:p></o:p></p>

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The induced current in the loop can be increased by

- A. Using a stronger magnetic field
- B. Moving the loop faster
- C. Replacing the loop by a coil of many turns
- D. All above
- E. Both A and B