

ECAT Pre General Science MCQ's Test For Physics Full Book

Sr	Questions	Answers Choice
1	The magnitude of resultant of three vectors is 3. Its x-component is one, y-component is two, then its z-component is:	A. 0 B. 1 C. 2 D. 3
2	The charge carriers in electrolyte are positive and negative	A. protons B. electrons C. ions D. none of these
3	Which of the following is most suitable as the core of transformer	A. Soft iron B. Alinco C. Steel D. None of these
4	If a given spring of spring constant k is cut into two identical segments, the spring constant of each segment is:	A. k/2 B. 2 k C. 4 k D. None of these
5	The inkjet printer eject a thin stream of:	A. Water B. Oil C. Ink D. Any above E. None of these
6	Step up transformer has a transformation ratio of 3:2. What is the voltage in secondary, if voltage in primary is 30V:	A. 45 V B. 15 V C. 90 V D. 300 V
7	When an oscillatory motion repeats itself, then this type of motion is called	A. vibratory motion B. constant motion C. fixed motion D. periodic motion
8	The reverse saturation current in a PN junction diode is only due to	A. Majority carriers B. Minority Carriers C. Acceptor ions D. Donor ions
9	A hollow insulated conduction sphere is given a positive charge of $10\mu\text{C}$. What will be the electric field at the centre of the sphere if its radius is 2 meters?	A. Zero B. $5 \times 10^{-2} \text{ N/C}$ C. $20 \times 10^{-2} \text{ N/C}$ D. $8 \times 10^{-2} \text{ N/C}$
10	In case of streamed lined flow of liquid, the loss of energy is	A. Maximum B. Minimum C. Infinite D. equal to what is in turbulent flow
11	The consumption of energy by a 1000 watt heter in half an hour is:	A. 5 Kwh B. 0.5 Kwh C. 2.5 Kwh D. 3.2 Kwh
12	The most common source of alternating voltage is:	A. Motor B. Transformer C. AC generator D. Both (A) and (C) E. Both (A) and (B)

13	The effects of bends in a wire on its electrical resistance are:	<p>align:justify">Zero<o:p></o:p></p></p> <p>B. <p class="MsoNormal" style="text-align:justify">Much larger<o:p></o:p></p></p> <p>C. <p class="MsoNormal" style="text-align:justify">Larger<o:p></o:p></p></p> <p>D. <p class="MsoNormal" style="text-align:justify">Smaller<o:p></o:p></p></p> <p>E. <p class="MsoNormal" style="text-align:justify">None of these<o:p></o:p></p></p>
14	R.M.S velocity of a particle is V at pressure P. If pressure increases by two times, then R.M.S velocity becomes	<p>A. 2V</p> <p>B. 3V</p> <p>C. 0.5V</p> <p>D. V</p>
15	Alfa , beta and gamma rays are emitted from a radio-active substance	<p>A. spontaneously</p> <p>B. when it is heated</p> <p>C. when it is exposed to light</p> <p>D. When it interacts with the other particle</p>
16	If the volume of the gas is to be increased by 4 times, then	<p>A. Temperature and pressure must be doubled</p> <p>B. At constant P the temperature must be increased by 4 times</p> <p>C. At constant T the pressure must be increased by four times</p> <p>D. It cannot be increased</p>
17	The threshold frequency of sodium is 6×10^6 MHz. The cut-off wavelength for this metal will be	<p>A. 500 m</p> <p>B. 500 nm</p> <p>C. 500 km</p> <p>D. 500 cm</p> <p>E. None of these</p>
18	Which of the following type of force can do no work on the particle on which it acts:	<p>A. Frictional force</p> <p>B. Gravitational force</p> <p>C. Electric force</p> <p>D. Centripetal force</p>
19	When a body moves to and fro motion, this type of motion is called	<p>A. translatory motion</p> <p>B. circular motion</p> <p>C. oscillatory motion</p> <p>D. all of them</p>
20	An LED emits light when it is:	<p>A. Forward biased</p> <p>B. Reverse biased</p> <p>C. Operated without battery</p> <p>D. Operated with heat source</p> <p>E. None of these</p>