

ECAT Physics Online Test

| Sr | Questions | Answers Choice |
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| 1 | Bernoulli's equation is applicable for | A. turbulent flow B. streamline flow C. both (a) and (b) D. all kinds of flows |
| 2 | The conventional current in a circuit is defined as " current which passes from a point at higher potential to a point at lower potential as if it represent a movement of | A. negative charges B. positive charges C. protons D. electrons |
| 3 | If a simple pendulum is shifted from karachi to K-2 cliff, its time period | A. remains the same B. decreases C. increases D. none of them |
| 4 | The value of the potential difference across the depletion region for the case of germanium is | A. 0.3 V B. 0.5 V C. 0.7 V D. 0.9 V |
| 5 | A digital system deals with quantities which has discrete values: | A. Two in number B. One in number C. Three in number D. Four in number E. None of these |
| 6 | The r.m.s. value of alternating current is equal to its maximum value at angle of | A. 60° B. 45° C. 30° D. 90° |
| 7 | The powers of tow electric bulbs are 100 W and 200 W. Both of them are joined with 220 V mains. The ratio of resistances of their filaments will be | A. 1 : 2 B. 2 : 1 C. 1 : 4 D. 4 : 1 |
| 8 | The graphical representation of ohm's law is | A. hyperbola B. straight line C. ellipse D. parabola |
| 9 | A certain charge liberates 0.8 g of oxygen. The same charge will liberate. how many g of silver? | A. 108 g B. 10.8 g C. 0.8 g D. 108/0.8 g |
| 10 | When a transistor is used as a switch the circuit in which the current is to be switched OFF and ON, is connected between the | A. base and emitter B. collector and emitter C. base and collector D. any one of these |
| 11 | The weight 'mg' of the bob is resolved into | A. one component B. two components C. three components D. four components |
| 12 | When there is no relative motion between the magnet and coil, the galvanometer indicates: | A. No current in circuit B. An increasing current C. A decreasing current D. Either B or C |
| 13 | If a liquid is heated in weightlessness, the heat is transmitted through | A. Conduction B. Convection C. Radiation D. Neither, because the liquid cannot be heated in weightlessness |

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| 14 | The inside cavity of the black body is | <p>A. painted white B. painted silver C. blackened with soot D. painted red</p> |
| 15 | The length of a metallic rod is 5 meter at 100°C. The coefficient of cubical expansion of the metal will be | <p>A. $2.0 \times 10^{-5} \text{ } ^\circ\text{C}^{-1}$ B. $4.0 \times 10^{-5} \text{ } ^\circ\text{C}^{-1}$ C. $6.0 \times 10^{-5} \text{ } ^\circ\text{C}^{-1}$ D. $2.33 \times 10^{-5} \text{ } ^\circ\text{C}^{-1}$</p> |
| 16 | Fluids have three types of energies. The Bernoulli's equation combines those energies. which of the following is one of the three enrgies possessed by a fluid? | <p>A. potential energy B. pressure energy C. strain energy D. (a) and (b) only</p> |
| 17 | Decibel is unit of | <p>A. Intensity of light B. x-ray radiation capacity C. sound loudness D. Energy of radiation</p> |
| 18 | An electric field is generated along the wire when: | <p>A. <p>Its resistance is very high</p></p> <p>B. <p>A constant potential is maintained across the wire</p></p> <p>C. <p>Net current through the wire is zero</p></p> <p>D. <p>A constant potential difference is maintained across the wire</p></p> <p>E. <p>Either (A) or (D)</p></p> |
| 19 | A sinusoidally alternating voltage or current can be graphically represented by a: | <p>A. Vector B. Rotating vector C. Clockwise vector D. Anticlockwise voltage vector E. None of these</p> |
| 20 | A succession of events which bring the system back to its initial condition is called | <p>A. reversible process B. irreversible process C. a cycle D. none of them</p> |