

ECAT Physics Online Test

| Sr | Questions | Answers Choice |
|----|--|---|
| 1 | The photoelectric effect, the maximum energy of photoelectrons depends on the | A. particular metal surface B. frequency of incident light C. both of them D. none of them |
| 2 | By which velocity a ball be projected vertically so that the distance covered by it in 5th seconds is twice the distance it covers in its 6th second ($g=10 \text{m/s}^2$) | A. 58.8 m/s B. 49 m/s C. 65 m/s D. 19.6 m/s |
| 3 | The bicycle pump provides a good example of | A. first law of thermodynamics B. second law of thermodynamics C. third law of thermodynamics 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 | Which of the following diode is used to derive the current in external circuit when light is incident in the circuit | A. photo diode B. light emitting diode C. photo voltaic cell D. none of these |
| 6 | The state in which ice, water and vapour coexists in equilibrium is called | A. zero degree celsius B. zero degree fahrenheit C. absolute zero D. 373 K |
| 7 | The phenomenon of generation of induced emf is called | A. Electrostatic induction B. Magnetic induction C. Electromagnetic induction D. Electric induction E. Both (A) and (D) |
| 8 | Referring to the above figure, the binding energy per nucleon increases upto mass number equal to: | A. 50 B. 100 C. 150 D. 200 E. 250 |
| 9 | 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 |
| 10 | The Phenomenon of generation of induced emf is called | A. Electrostatic induction B. Magnetic induction C. Electromagnetic induction D. Electric induction E. Both A and B |
| 11 | The direction of the acceleration is the same as that of | A. speed B. velocity C. both of them D. none of them |
| 12 | If the instantaneous velocity of a body does not change, the body is said to be moving with | A. average velocity B. uniform velocity C. instantaneous velocity D. variable velocity |
| 13 | How many isotopes of helium are present? | A. 1 B. 2 C. 3 D. 4 |
| | | A. |

A. At rest<o:p></o:p>
B. <span style="font-span style-span style="font-span style="font-span style="font-span style="f

| 14 | Electrostatics is the branch of physics which deals with the study of electro charges: | size:12.Upt;line-height:1U/%;tont-tamily: "Times New Roman","serif"">At rest under the action of electric forces <o:p></o:p> C. In motion under the action of electric forces<o:p></o:p> D. In motion<o:p></o:p> E. At rest under the action of nuclear forces<o:p></o:p> |
|----|---|--|
| 15 | Amperean path is a: | A. Closed path<0:p> B. Rectangular path<0:p> C. Circular path<0:p> D. Circular path<0:p> D. Any of above<o:p></o:p> E. Broken path<0:p> |
| 16 | when the deformation produced in the material become permanent, this type of behaviour is called | A. proportionality B. elasticity C. plasticity D. none of them |
| 17 | In the reverse process, the working substance passes through the same stages as in the direct process and | A. thermal effects at each stage are exactly reversed B. mechanical effects at each stage are exactly reversed C. thermal and mechanical effects at each stage remain the same D. thermal and mechanical effects at each stage are exactly reversed |
| 18 | To convert galvanometer into ammeter we connect | A. small resistance in parallel with galvanometer B. small resistance in series with galvanometer C. high resistance in series with galvanometer D. high resistance in parallel with galvanometer |
| 19 | Terminal velocity is the maximum velocity attained by a spherical droplet when the drag forcethe weight of droplet: | A. Is smaller than B. Is greater than C. Becomes equal to D. None of these |
| 20 | In series RC circuit when $R=X_C$, then the phase angle is | A. 0 ° B. 90 ° C. 70 ° D. 45 ° |

