

ECAT Physics Chapter 4 Work and Energy

| Sr | Questions | Answers Choice |
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| 1 | The total work done in moving the body up and then down through the same height in a gravitational field is equal to: | A. mgh B. Its wight C. Weight X height D. Zero |
| 2 | Which force is not a conservative force? | A. Frictional force B. Gravitational force C. Electric force D. Elastic spring force |
| 3 | Work is a | A. Scalar quantity B. Vector quantity C. Base quantity D. None of these |
| 4 | If one newton force acts on a body and displaces the body through 1m work done on body is | A. 1 dyne B. 1 joule C. 1KJ D. 1 Watt |
| 5 | Watt x second is unit of: | A. Force B. Work C. Power D. None of these |
| 6 | Work is a always done on a body when | A. A force acts on it B. It moves through certain distance C. None of A or B is correct D. Both A and B are correct |
| 7 | Work done on a body by gravity in lifting it up to certain height is | A. Maximum B. Minimum C. Zero D. Negative |
| 8 | Work has the dimensions as that of | A. Torque B. Angular momentum C. Linear momentum D. Power |
| 9 | The types of mechanical energy is/are: | A. Kinetic energy B. Potential energy C. Both of these D. None of these |
| 10 | Which of the following types of force can do no work on the particle on which it acts | A. Frictional force B. Gravitational force C. Electric force D. Centripetal force |
| 11 | Teh consumption of energy by a 1000 watt heater in half an hour is: | A. 5 Kwh B. 0.5 Kwh C. 2.5 Kwh D. 3.2 Kwh |
| 12 | A boy pulls a toy car through a distance of 5 m by applying a force of 0.5 N, Which makes an angle of 60° with the horizontal. The work done by the boy is: | A. 1.25 J B. 12.5 J C. 125 J D. None of these |
| 13 | A 2 kg block is held 1 m above floor for 50 seconds. The work done is: | A. Zero B. 10.2 J C. 100 J D. 980 J |
| 14 | Most of the geysers occur in: | A. Volcanic regions B. Magnetic regions C. Northern region D. None of these |
| 15 | When a force of 0.5 N displaces a body through a distance of 2m in the direction of force, the work done is: | A. 2 J B. 0.25 J C. 1 J D. 0.5 J |

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| 16 | Work done is maximum when angle between force and displacement is: | <p>A. 0°</p> <p>B. 90°</p> <p>C. 180°</p> <p>D. None of these</p> |
| 17 | When velocity of moving body is doubled, the quantity which is also doubled is its: | <p>A. K.E.</p> <p>B. Acceleration</p> <p>C. Momentum</p> <p>D. P.E.</p> |
| 18 | A boy pulls a toy car through a distance of 5 m by applying a force of 0.5 N, which makes and angle of 60° with the horizontal. The work done by the boy is: | <p>A. 1.25 J</p> <p>B. 12.5 J</p> <p>C. 125 J</p> <p>D. None of these</p> |
| 19 | Work done is maximum when angle between force and displacement is | <p>A. 0°</p> <p>B. 90°</p> <p>C. 180°</p> <p>D. None of these</p> |
| 20 | When two protons are brought are brought closer potential energy of both of them: | <p>A. Increases</p> <p>B. Decreases</p> <p>C. Remains same</p> <p>D. None of these</p> |