

Physics ECAT Pre Engineering Chapter 4 Work and Energy Online Test

| Sr | Questions | Answers Choice |
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| 1 | A body moves a distance of 10 m along a straight line under the action of a force of 5 N. If the work done is 25 J, the angle which force makes with the direction of motion of a body is: | <p>A. 0°</p> <p>B. 30°</p> <p>C. 60°</p> <p>D. 90°</p> |
| 2 | A 100 kg car is moving at a speed of 10 m/sec and comes to rest after covering a distance of 50 m. the amount of work done against friction is: | <p>A. $+5 \times 10^1 \text{ J}$</p> <p>B. $+5 \times 10^2 \text{ J}$</p> <p>C. $+5 \times 10^3 \text{ J}$</p> <p>D. $+5 \times 10^4 \text{ J}$</p> |
| 3 | When a body moves against the force of friction on a horizontal plane, the work done by the body is: | <p>A. Positive</p> <p>B. Negative</p> <p>C. Zero</p> <p>D. None of these</p> |
| 4 | In the force applied to parallel to the direction of motion, then the work done is: | <p>A. Positive</p> <p>B. Negative</p> <p>C. Zero</p> <p>D. None of these</p> |
| 5 | A 2 kg block is held 1 m above floor for 50 seconds. The work done is: | <p>A. Zero</p> <p>B. 10.2 J</p> <p>C. 100 J</p> <p>D. 980 J</p> |
| 6 | Work done in lower and bucket into the well is: | <p>A. Zero</p> <p>B. Positive</p> <p>C. Negative</p> <p>D. None of these</p> |
| 7 | A field in which the work done is moving a body along closed path is zero is called: | <p>A. Nuclear field</p> <p>B. Conservative field</p> <p>C. Gravitational field</p> <p>D. Non-conservative field</p> |
| 8 | When a force of 0.5 N displaces a body through a distance of 2m in the direction of force, the work done is: | <p>A. 2 J</p> <p>B. 0.25 J</p> <p>C. 1 J</p> <p>D. 0.5 J</p> |
| 9 | The work done in moving a body between two points in a conservation field is independent of the: | <p>A. Direction</p> <p>B. Force applied</p> <p>C. Path followed by the body</p> <p>D. None</p> |

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| | | D. Power |
| 10 | Which of the following type 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 | The field in which work done is moving body between two points depends upon the path followed is called: | A. Conservative field B. Non-conservative field C. Electric field D. None of these |
| 12 | Work done along a closed path in a gravitational field is: | A. Maximum B. Minimum C. Zero D. Unity |
| 13 | A body moves a distance of 10 m along a straight line under the action of a force of 5 N and work done is 25J. the angle which the force makes with the direction of motion will be: | A. 60° B. 90° C. 30° D. 0° |
| 14 | The space around the earth within which it exerts a force of attraction on other bodies is known as: | A. Nuclear field B. Conservative field C. Electric field D. Gravitational field |
| 15 | Work done is maximum when angle between force and displacement is: | A. 0° B. 90° C. 180° D. None of these |