

Duration: 120 Mins

Total Marks: 34

ID: ITISKILL5691WZ

Student Name: _____ Roll No: _____

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| <p>1. What is the unit of speed?</p> <p>A) Metre/hour B) Metre/second
C) Metre/second² D) Metre/minute</p> <hr style="border-top: 1px dashed #ccc;"/> <p>2. What is the formula for acceleration?</p> <p>A) Metre/hour B) Metre/second²
C) Metre/second D) Metre/minute</p> <hr style="border-top: 1px dashed #ccc;"/> <p>3. What is called if a force of 1Newton acts on a body and moves it through a distance of 1 metre?</p> <p>A) 10 Joules B) 10 dynes
C) 1 dyne D) 1 Joule</p> <hr style="border-top: 1px dashed #ccc;"/> <p>4. What is the rate of change of displacement of a body?</p> <p>A) Body at rest B) Body at motion
C) Speed D) Velocity</p> <hr style="border-top: 1px dashed #ccc;"/> <p>5. What is the acceleration of an aeroplane taking off from landing field has to run 700 metres if it leaves the ground in 10 seconds from the start?</p> <p>A) 10 metre/sec² B) 14 metre/sec²
C) 12 metre/sec² D) 8 metre/sec²</p> <hr style="border-top: 1px dashed #ccc;"/> <p>6. What is the equivalent unit for 1 horse power in metric system?</p> <p>A) 77 kg.m/sec B) 76 kg.m/sec
C) 78 kg.m/sec D) 75 kg.m/sec</p> <hr style="border-top: 1px dashed #ccc;"/> <p>7. How many ergs for 1 Joule?</p> <p>A) 10³ ergs B) 10⁹ ergs
C) 10⁵ ergs D) 10⁷ ergs</p> <hr style="border-top: 1px dashed #ccc;"/> <p>8. What is the formula for velocity?</p> <p>A) Distance covered/Time B) Displacement/Time
C) Change of momentum/Time D) Change in velocity/Time</p> | <p>9. What is the work done in unit time?</p> <p>A) Acceleration B) Power
C) Force D) Energy</p> <hr style="border-top: 1px dashed #ccc;"/> <p>10. How many watts for 1 horse power in British system?</p> <p>A) 736 watts B) 726 watts
C) 746 watts D) 756 watts</p> <hr style="border-top: 1px dashed #ccc;"/> <p>11. What is the capacity of a body to do work is called?</p> <p>A) Energy B) Power
C) Acceleration D) Force</p> <hr style="border-top: 1px dashed #ccc;"/> <p>12. What is called if a body posses only magnitude or size alone?</p> <p>A) Scalar quantity B) Vector quantity
C) Velocity D) Speed</p> <hr style="border-top: 1px dashed #ccc;"/> <p>13. What is called if a body posses both magnitude and direction of velocity?</p> <p>A) Velocity B) Vector quantity
C) Speed D) Scalar quantity</p> <hr style="border-top: 1px dashed #ccc;"/> <p>14. What is the work done, if a force of 250 newtons acted upon a body and the body has been moved through a distance of 15 metres?</p> <p>A) 3720 Joules B) 3740 Joules
C) 3730 Joules D) 3750 Joules</p> <hr style="border-top: 1px dashed #ccc;"/> <p>15. What is the potential energy in a body of mass 10 kg kept on the top of a pole 20 metres height?</p> <p>A) 1962 Joules B) 1952 Joules
C) 1942 Joules D) 1972 Joules</p> <hr style="border-top: 1px dashed #ccc;"/> <p>16. How many newtons for 1 kilogram?</p> <p>A) 98.1 Newtons B) 0.981 Newtons
C) 9.81 Newtons D) 981 Newtons</p> <hr style="border-top: 1px dashed #ccc;"/> <p>17. What is called if a body does not change its position with respect to its surroundings?</p> |
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- A) Body at motion
C) Speed

- B) Velocity
D) Body at rest

C) 635 Joules

D) 630 Joules

18. What is the acceleration of a car if the speed of the car has increased from 25 km per hour to 40 km per hour in one minute?

- A) 0.69 m/sec^2
C) 0.069 m/sec^2
- B) 0.059 m/sec^2
D) 0.59 m/sec^2

19. What is the unit for velocity?

- A) Metre/second^2
C) Metre/hour
- B) Metre/second
D) Metre/minute

20. What is the unit of acceleration of an object?

- A) Metre/minutes^2
C) Metre/second^2
- B) Metre/minutes
D) Metre/second

21. How much work done in one hour, if a pump can raise 100 liters of water through a height of 200 meters in one minutes?

- A) $12 \times 10^7 \text{ kg meter}$
C) $12 \times 10^5 \text{ kg meter}$
- B) $12 \times 10^4 \text{ kg meter}$
D) $12 \times 10^6 \text{ kg meter}$

22. What maximum height a stone will reach if it is thrown upwards with a velocity of 20 m/sec ? ($g = 10 \text{ m/sec}^2$)

- A) 40 m
C) 20 m
- B) 30 m
D) 10 m

23. How many watts for 1 horse power in metric system?

- A) 755.5 watts
C) 725.5 watts
- B) 745.5 watts
D) 735.5 watts

24. What is velocity of a body travels a distance of 168 metres in a line in 21 seconds?

- A) 12 m/sec
C) 8 m/sec
- B) 6 m/sec
D) 10 m/sec

25. What is the kinetic energy of a bullet of mass 5gm travels with a speed of 500 m/sec ?

- A) 625 Joules
B) 620 Joules

26. What is the potential energy, if a body of mass 250 kg is at a height of 30 metre?

- A) 75.57 KJ
C) 73.57 KJ
- B) 72.57 KJ
D) 74.57 KJ

27. What is called if a body changes its position with respect to its surroundings?

- A) Body at rest
C) Speed
- B) Body at motion
D) Velocity

28. What is the retardation of a car moving with a velocity of 50 km/hr is brought to rest in 45 seconds?

- A) 0.30 m/sec^2
C) 0.40 m/sec^2
- B) 0.20 m/sec^2
D) 0.10 m/sec^2

29. What is the ratio of power output to power input?

- A) Work
C) Efficiency
- B) Acceleration
D) Energy

30. What is the formula for kinetic energy?

- A) $(1/2) mv \text{ joule}$
C) $(1/2) mv^2 \text{ joule}$
- B) $(2/3) mv \text{ joule}$
D) $(2/3) mv^2 \text{ joule}$

31. What is the formula for speed?

- A) Distance covered/Time
C) Distance in definite direction /Time
- B) Change in velocity/Time
D) Change in momentum/Time

32. What is the work done in joules if a load of 15.5 kg is lifted through a height of 4.4 metres?

- A) 669 Joules
C) 649 Joules
- B) 639 Joules
D) 659 Joules

33. What is the formula for potential energy?

- A) $mgh^2 \text{ joule}$
C) $mgh \text{ joule}$
- B) $2/3 mgh \text{ joule}$
D) $1/2 mgh \text{ joule}$

34. What is the speed of a train of 80 metre long train passes a railway station platform of 120 metres length in 20 seconds?

- A) 32 km/hour
C) 30 km/hour
- B) 34 km/hour
D) 36 km/hour