

Duration: 120 Mins

Total Marks: 34

Q.ID: ITISKILL5691WZ

1. What is called if a force of 1Newton acts on a body and moves it through a distance of 1 metre?

- A) 1 Joule B) 1 dyne
C) 10 Joules D) 10 dynes

Answer: A) 1 Joule

2. What is the formula for velocity?

- A) Change of momentum/Time B) Change in velocity/Time
C) Displacement/Time D) Distance covered/Time

Answer: C) Displacement/Time

3. What is called if a body posses both magnitude and direction of velocity?

- A) Velocity B) Scalar quantity
C) Vector quantity D) Speed

Answer: C) Vector quantity

4. 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 B) 34 km/hour
C) 36 km/hour D) 30 km/hour

Answer: C) 36 km/hour

5. What is called if a body posses only magnitude or size alone?

- A) Velocity B) Vector quantity
C) Scalar quantity D) Speed

Answer: C) Scalar quantity

6. 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 B) 649 Joules
C) 659 Joules D) 639 Joules

Answer: A) 669 Joules

7. 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 B) 0.40 m/sec^2
C) 0.20 m/sec^2 D) 0.10 m/sec^2

Answer: A) 0.30 m/sec^2

8. What is called if a body changes its position with respect to

its surroundings?

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

Answer: D) Body at motion

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

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

Answer: A) 735.5 watts

10. What is the equivalent unit for 1 horse power in metric system?

- A) 77 kg.m/sec B) 76 kg.m/sec
C) 78 kg.m/sec D) 75 kg.m/sec

Answer: D) 75 kg.m/sec

11. 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?

- A) 10 metre/sec² B) 14 metre/sec²
C) 12 metre/sec² D) 8 metre/sec²

Answer: C) 12 metre/sec^2

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

- A) 630 Joules B) 620 Joules
C) 635 Joules D) 625 Joules

Answer: D) 625 Joules

13. What is the rate of change of displacement of a body?

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

Answer: B) Velocity

14. What maximum height a stone will reach if it is thrown upwords with a velocity of 20m/sec?(g = 10 m/sec^2)

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

Answer: A) 20 m

15. What is the formula for speed?

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

Answer: C) Distance covered/Time

16. How many newtons for 1 kilogram?

- A) 9.81 Newtons B) 0.981 Newtons
C) 98.1 Newtons D) 981 Newtons

Answer: A) 9.81 Newtons

17. What is the formula for acceleration?

- A) Metre/hour B) Metre/second²
C) Metre/minute D) Metre/second

Answer: B) Metre/second²

18. What is the capacity of a body to do work is called?

- A) Power B) Force
C) Acceleration D) Energy

Answer: D) Energy

19. What is the unit of speed?

- A) Metre/hour B) Metre/second²
C) Metre/minute D) Metre/second

Answer: D) Metre/second

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

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

Answer: D) 73.57 KJ

21. What is the unit for velocity?

- A) Metre/hour B) Metre/second²
C) Metre/minute D) Metre/second

Answer: D) Metre/second

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

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

Answer: C) 8 m/sec

23. What is the potential energy in a body of mass 10 kg kept on the top of a pole 20 metres height?

- A) 1942 Joules B) 1952 Joules
C) 1972 Joules D) 1962 Joules

Answer: D) 1962 Joules

24. 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/sec² B) 0.069 m/sec²
C) 0.059 m/sec² D) 0.59 m/sec²

Answer: B) 0.069 m/sec²

25. What is the work done in unit time?

- A) Energy B) Power
C) Acceleration D) Force

Answer: B) Power

26. 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?

- A) 3750 Joules B) 3740 Joules
C) 3730 Joules D) 3720 Joules

Answer: A) 3750 Joules

27. What is the formula for kinetic energy?

- A) $(1/2) mv$ joule B) $(1/2) mv^2$ joule
C) $(2/3) mv^2$ joule D) $(2/3) mv$ joule

Answer: B) $(1/2) mv^2$ joule

28. What is the formula for potential energy?

- A) $2/3 mgh$ joule B) mgh^2 joule
C) $1/2 mgh$ joule D) mgh joule

Answer: D) mgh joule

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

- A) Metre/minutes B) Metre/second²
C) Metre/second D) Metre/minutes²

Answer: B) Metre/second²

30. How many watts for 1 horse power in British system?

- A) 746 watts B) 726 watts
C) 736 watts D) 756 watts

Answer: A) 746 watts

31. What is called if a body does not change its position with respect to its surroundings?

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

Answer: A) Body at rest

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

A) Energy

B) Acceleration

C) 12×10^6 kg meter

D) 12×10^4 kg meter

C) Work

D) Efficiency

Answer: B) 12×10^5 kg meter

Answer: D) Efficiency

33. 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) 12×10^7 kg meter

B) 12×10^5 kg meter

34. How many ergs for 1 Joule?

A) 10^5 ergs

B) 10^9 ergs

C) 10^3 ergs

D) 10^7 ergs

Answer: D) 10^7 ergs