

Duration: 30 Mins

Total Marks: 25

ID: ITISKILL3333IL

Student Name: _____ Roll No: _____

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

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

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

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

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

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

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

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

5. 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) 12×10^5 kg meter B) 12×10^6 kg meter
C) 12×10^4 kg meter D) 12×10^7 kg meter

6. What is the formula for speed?

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

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

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

8. What is the formula for kinetic energy?

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

9. 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 dynes D) 10 Joules

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

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

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) 8 metre/sec² D) 12 metre/sec²

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

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

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

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

14. 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) 36 km/hour B) 32 km/hour
C) 30 km/hour D) 34 km/hour

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

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

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

- A) 6 m/sec
- C) 10 m/sec

- B) 8 m/sec
- D) 12 m/sec

C) 3720 Joules

D) 3750 Joules

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

- A) 76 kg.m/sec
- C) 77 kg.m/sec

- B) 78 kg.m/sec
- D) 75 kg.m/sec

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) 0.069 m/sec²

B) 0.59 m/sec²

C) 0.69 m/sec²

D) 0.059 m/sec²

19. What maximum height a stone will reach if it is thrown upwards with a velocity of 20m/sec?(g = 10m/sec²)

- A) 20 m
- C) 30 m

- B) 40 m
- D) 10 m

20. 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) 3730 Joules

B) 3740 Joules

21. What is the formula for velocity?

A) Change of momentum/Time

B) Displacement/Time

C) Distance covered/Time

D) Change in velocity/Time

22. What is the unit for velocity?

A) Metre/hour

B) Metre/second

C) Metre/minute

D) Metre/second²

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

A) Power

B) Energy

C) Acceleration

D) Force

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

A) 1952 Joules

B) 1962 Joules

C) 1972 Joules

D) 1942 Joules

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

A) Body at motion

B) Velocity

C) Speed

D) Body at rest