

Duration: 30 Mins

Total Marks: 25

ID: ITISKILL7203M0

Student Name: _____ Roll No: _____

1. What is the unit of speed?

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

- A) 25 B) 10
 C) 15 D) 6

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

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

10. 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) 34 km/hour B) 36 km/hour
 C) 32 km/hour D) 30 km/hour

3. What is the unit for velocity?

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

11. How many newtons for 1 kilogram?

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

4. What is the formula for acceleration?

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

12. 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) 0.059 m/sec² B) 0.69 m/sec²
 C) 0.069 m/sec² D) 0.59 m/sec²

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

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

13. What is the mass in gram, if a force of 15 dyres acting on a mass m producing an acceleration of 2.5 cm/sec²?

- A) 7 grams B) 6 grams
 C) 8 grams D) 9 grams

6. What is the formula for velocity?

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

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

- A) 0.20 m/sec² B) 0.40 m/sec²
 C) 0.10 m/sec² D) 0.30 m/sec²

7. What is the weight force of a car has a mass of 800 kg?(Take g = 9.81m/sec)

- A) 7748 Newton B) 7848 Newton
 C) 7487 Newton D) 7847 Newton

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

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

8. 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

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

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

9. What is the specific gravity of the metal, if the piece of metal weighs 150 grams in air and 125 grams in water?

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

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

18. What is the formula for kinetic energy?

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

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

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

20. 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) 12 metre/sec²
- B) 14 metre/sec²
- C) 8 metre/sec²
- D) 10 metre/sec²

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

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

22. What is the work done in unit time?

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

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

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

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

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

25. What is the volume (V) of mercury in cm³, if mass (m) of mercury is 1 kg and density (r) is 13.6 g/cm³?

- A) 73.43 cm³
- B) 73.23 cm³
- C) 73.33 cm³
- D) 73.53 cm³