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**Score: 32/38 (84.21%)**

**Code: 7377**

1. Which machine converts mechanical energy into electrical energy?

- A) Battery  
 B) **Generator (Correct)**  
 C) Heater  
 D) Iron box

2. Which is the unit of current?

- A) **Ampere (Correct)**  
 B) Volt  
 C) Ohm  
 D) Watt

3. Which is the unit of resistance?

- A) Ampere  
 B) Volt  
 C) **Ohm (Correct)**  
 D) Watt

4. What is the flow of electrons in any conductor?

- A) Voltage  
 B) **Current (Correct)**  
 C) Resistance  
 D) Power

5. What is the formula for speed?

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

6. What is the unit of speed?

- A) **Metre/second (Correct)**  
 B) Metre/second<sup>2</sup>  
 C) Metre/minute  
 D) Metre/hour

7. What is the formula for velocity?

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

8. What is the unit for velocity?

- A) **Metre/second (Correct)**  
 B) Metre/second<sup>2</sup>  
 C) Metre/minute  
 D) Metre/hour

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

- A) Speed  
 B) Velocity  
 C) Vector quantity  
 D) **Scalar quantity (Correct)**

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

- A) Speed  
 B) Velocity  
 C) **Vector quantity (Correct)**  
 D) Scalar quantity

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

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

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

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

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

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

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

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

15. 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) 30 km/hour  
 B) 32 km/hour  
 C) 34 km/hour  
 D) **36 km/hour (Correct)**

16. What is the formula for acceleration?

- A) Metre/second  
 B) **Metre/second<sup>2</sup> (Correct)**  
 C) Metre/minute  
 D) Metre/hour

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

- A) Metre/second  
 B) **Metre/second<sup>2</sup> (Correct)**  
 C) Metre/minutes  
 D) Metre/minutes<sup>2</sup>

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) 0.059 m/sec<sup>2</sup>  
B) 0.59 m/sec<sup>2</sup>  
**C) 0.069 m/sec<sup>2</sup> (Correct)**  
D) 0.69 m/sec<sup>2</sup>

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

- A) 0.40 m/sec<sup>2</sup>  
B) **0.30 m/sec<sup>2</sup> (Correct)**  
C) 0.20 m/sec<sup>2</sup>  
D) 0.10 m/sec<sup>2</sup>

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) 8 metre/sec<sup>2</sup>  
B) 10 metre/sec<sup>2</sup>  
C) **12 metre/sec<sup>2</sup>**  
D) 14 metre/sec<sup>2</sup> (Incorrect)

21. What maximum height a stone will reach if it is thrown upwards with a velocity of 20m/sec?(g = 10m/sec<sup>2</sup>)

- A) 10 m  
B) **20 m (Correct)**  
C) 30 m  
D) 40 m

22. What is the work done in unit time?

- A) Energy  
B) **Power (Correct)**  
C) Force  
D) Acceleration

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

- A) **Energy (Correct)**  
B) Power  
C) Acceleration  
D) Force

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

- A) Work  
B) Energy  
C) **Efficiency (Correct)**  
D) Acceleration

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

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

26. How many ergs for 1 Joule?

- A) 10<sup>3</sup> ergs  
B) 10<sup>5</sup> ergs  
C) **10<sup>7</sup> ergs (Correct)**  
D) 10<sup>9</sup> ergs

27. How many newtons for 1 kilogram?

- A) 981 Newtons  
B) 98.1 Newtons  
C) **9.81 Newtons (Correct)**  
D) 0.981 Newtons

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

- A) 725.5 watts  
B) **735.5 watts**  
C) 745.5 watts (Incorrect)  
D) 755.5 watts

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

- A) 726 watts  
B) 736 watts  
C) **746 watts (Correct)**  
D) 756 watts

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

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

31. What is the formula for potential energy?

- A) **mgh joule (Correct)**  
B) mgh<sup>2</sup> joule  
C) 1/2 mgh joule  
D) 2/3 mgh joule

32. What is the formula for kinetic energy?

- A) (1/2) mv joule  
B) **(1/2) mv<sup>2</sup> joule (Correct)**  
C) (2/3) mv<sup>2</sup> joule  
D) (2/3) mv joule

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 x 10<sup>4</sup> kg meter  
B) **12 x 10<sup>5</sup> kg meter**  
C) 12 x 10<sup>6</sup> kg meter  
D) 12 x 10<sup>7</sup> kg meter (Incorrect)

34. 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) 3720 Joules  
B) 3730 Joules  
C) 3740 Joules  
D) **3750 Joules (Correct)**

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

- A) 72.57 KJ  
B) **73.57 KJ (Correct)**  
C) 74.57 KJ  
D) 75.57 KJ

36. 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) **1962 Joules (Correct)**  
D) 1972 Joules

37. 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) 649 Joules

C) 659 Joules

**D) 669 Joules (Correct)**

with a speed of 500 m/sec?

A) 620 Joules

**B) 625 Joules**

C) 630 Joules

D) 635 Joules (Incorrect)

38. What is the kinetic energy of a bullet of mass 5gm travels