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Score: 24/38 (63.16%)   **Code: 2971**

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**
C) Resistance   D) Power (Incorrect)

5. What is the formula for speed?

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

6. What is the unit of speed?

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

7. What is the formula for velocity?

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

8. What is the unit for velocity?

A) Metre/second (Correct)   B) Metre/second^2
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 (Incorrect)
C) Vector quantity   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 (Incorrect)   **B) Metre/second^2**
C) Metre/minute   D) Metre/hour

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

A) Metre/second   **B) Metre/second^2 (Correct)**
C) Metre/minutes   D) Metre/minutes^2

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^2

B) 0.59 m/sec^2 (Incorrect)

C) 0.069 m/sec^2

D) 0.69 m/sec^2

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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^2

B) 0.30 m/sec^2 (Correct)

C) 0.20 m/sec^2

D) 0.10 m/sec^2

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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^2

B) 10 metre/sec^2

C) 12 metre/sec^2

D) 14 metre/sec^2 (Incorrect)

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

A) 10 m

B) 20 m (Correct)

C) 30 m

D) 40 m

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22. What is the work done in unit time?

A) Energy

B) Power (Correct)

C) Force

D) Acceleration

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

A) Energy (Correct)

B) Power

C) Acceleration

D) Force

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

A) Work

B) Energy

C) Efficiency (Correct)

D) Acceleration

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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

B) 10 Joules

C) 1 dyne (Incorrect)

D) 10 dynes

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26. How many ergs for 1 Joule?

A) 10^3 ergs

B) 10^5 ergs

C) 10^7 ergs (Correct)

D) 10^9 ergs

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27. How many newtons for 1 kilogram?

A) 981 Newtons

B) 98.1 Newtons

C) 9.81 Newtons

D) 0.981 Newtons (Incorrect)

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

A) 725.5 watts

B) 735.5 watts (Correct)

C) 745.5 watts

D) 755.5 watts

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

A) 726 watts

B) 736 watts

C) 746 watts (Correct)

D) 756 watts

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

A) 75 kg.m/sec

B) 76 kg.m/sec

C) 77 kg.m/sec

D) 78 kg.m/sec (Incorrect)

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31. What is the formula for potential energy?

A) mgh joule

B) mgh^2 joule

C) 1/2 mgh joule

D) 2/3 mgh joule (Incorrect)

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32. What is the formula for kinetic energy?

A) (1/2) mv joule (Incorrect)

B) (1/2) mv^2 joule

C) (2/3) mv^2 joule

D) (2/3) mv joule

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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 104 kg meter

B) 12 x 105 kg meter (Correct)

C) 12 x 106 kg meter

D) 12 x 107 kg meter

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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 (Incorrect)

D) 3750 Joules

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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

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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

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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 (Incorrect)

D) 669 Joules

38. 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 (Correct)

C) 630 Joules

D) 635 Joules