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Score: 26/38 (68.42%)

Code: 8553

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/second²
 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/second²
 C) Metre/minute
 D) Metre/hour

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

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

10. What is called if a body possesses 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/second² (Correct)**
 C) Metre/minute
 D) Metre/hour

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

- A) Metre/second (Incorrect)
 B) **Metre/second² (Correct)**
 C) Metre/minutes
 D) Metre/minutes²

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/sec²
C) 0.069
m/sec²

- B) 0.59 m/sec²
D) 0.69 m/sec²
(Incorrect)

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/sec²
C) 0.20 m/sec²
(Incorrect)
- B) 0.30
m/sec²
- D) 0.10 m/sec²

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/sec²
- B) 10
metre/sec²
- C) 12
metre/sec²
- D) 14
metre/sec²
(Incorrect)

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

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

22. What is the work done in unit time?

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

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

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

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

- A) Work
C) Efficiency
- B) Energy (Incorrect)
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)
C) 1 dyne
- B) 10 Joules
D) 10 dynes

26. How many ergs for 1 Joule?

- A) 10³ ergs
C) 10⁷ ergs (Correct)
- B) 10⁵ ergs
D) 10⁹ ergs

27. How many newtons for 1 kilogram?

- A) 981 Newtons (Incorrect)
B) 98.1 Newtons

C) 9.81 Newtons

D) 0.981 Newtons

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

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

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

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

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

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

31. What is the formula for potential energy?

- A) mgh joule (Correct)
C) 1/2 mgh joule
- B) mgh² joule
D) 2/3 mgh joule

32. What is the formula for kinetic energy?

- A) (1/2) mv joule (Incorrect)
C) (2/3) mv² joule
- B) (1/2) mv² 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 104 kg meter
C) 12 x 106 kg meter
(Incorrect)
- B) 12 x 105 kg meter
D) 12 x 107 kg meter

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
C) 3740 Joules
- B) 3730 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
C) 74.57 KJ
- B) 73.57 KJ
D) 75.57 KJ (Incorrect)

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
C) 1962 Joules (Correct)
- B) 1952 Joules
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 (Incorrect)

C) 659 Joules

D) 669 Joules

with a speed of 500 m/sec?

A) 620 Joules

B) 625 Joules (Correct)

C) 630 Joules

D) 635 Joules

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