

A) 0.059
m/sec²
**C) 0.069
m/sec²**

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

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
(Incorrect) B) **0.30
m/sec²**
C) 0.20 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
(Incorrect) B) 10
metre/sec²
C) **12
metre/sec²** D) 14
metre/sec²

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 B) **20 m**
C) 30 m D) 40 m (Incorrect)

22. What is the work done in unit time?

A) Energy (Incorrect) B) **Power**
C) Force D) Acceleration

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

A) **Energy** B) Power (Incorrect)
C) Acceleration D) Force

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

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

26. How many ergs for 1 Joule?

A) 10³ ergs B) 10⁵ ergs (Incorrect)
C) **10⁷ ergs** D) 10⁹ ergs

27. How many newtons for 1 kilogram?

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

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

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

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

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

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

31. What is the formula for potential energy?

A) **mgh joule** B) mgh² joule
(Incorrect) 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) mv² joule**
C) (2/3) mv² joule D) (2/3) mv joule (Incorrect)

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**
C) 12 x 106 kg meter
(Incorrect) 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 (Incorrect) B) 3730 Joules
C) 3740 Joules D) **3750 Joules**

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**
C) 74.57 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 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 (Incorrect) B) 649 Joules
C) 659 Joules 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

C) 630 Joules (Incorrect)

D) 635 Joules
