

Q.1 What is the SI unit of Work?

- A: Joule
- B: erg
- C: g-cm
- D: Watt

Q.2 1 joule = _____ erg.

- A: 10^9
- B: 10^5
- C: 10^7
- D: 10^{10}

Q.3 Which of the followings is an example of work done against force?

- A: Getting up with the stairs
- B: Get down with the stairs
- C: Walking on the flat ground
- D: Dropping any object down from the top

Q.4 What happens to its potential energy when an object is taken to high altitude?

- A: Its potential energy increases
- B: Its potential energy decreases
- C: Its potential energy remain same
- D: None of the above

Q.5 What is the unit of energy in SI system?

- A: Joule
- B: erg
- C: Watt
- D: Newton

Q.6 What is the unit of energy in c.g.s system?

- A: dyne
- B: erg
- C: newton-meter/second
- D: dyne-cm/second

Q.7 What is energy?

- A: energy is the rate of change of work done;
- B: It is the ability to do work;
- C: Both A and B;
- D: none of the above;

Q.8 The rate of change of work is _____ .

- A: Power
- B: Force
- C: Momentum
- D: Energy

Q.9 What is the unit of power?

- A: Watt
- B: Newton
- C: Joule
- D: Newton-meter

Q.10 Potential energy = mass \times _____ \times height.

- A: Displacement
- B: Velocity
- C: Density
- D: Gravitational acceleration

Q.11 1 Horse Power (HP) = _____ Watt.

- A: 446
- B: 766
- C: 746
- D: 674

Q.12 If a person walk on horizontal road with a suitcase on his hand then the work done is zero.

- A: This statement is true;
- B: This statement is false;

Q.13 What is the formula of work done?

- A: Work done = force \times displacement;
- B: Work done = force \times velocity;

C: Work done = pressure \times displacement

D: Work done = mass \times acceleration;

Q.14 An object of mass 200 g moving with velocity 50 cm/s. What is its kinetic energy?

A: 2.1×10^5 erg

B: 2.0×10^5 erg

C: 2.8×10^5 erg

D: 2.5×10^5 erg

Q.15 Which of the following is true?

A: Power = work done \times time;

B: Power = work done/time;

C: Power = work done \times velocity;

D: Power = work done/ velocity;

Q.16 A machine do a work of 100 joule in 20 second. What is its power?

A: 120 watt

B: 80 watt

C: 5 watt

D: 2000 watt

Q.17 Which of the following is equal with Newton-meter?

A: Joule

B: Horse Power

C: Watt

D: Pascal

Q.18 Erg is related to –

A: dyne-cm

B: dyne/secon

C: dyne-second

D: dyne/cm

Q.19 Due to application of 5 N force an object moves 10 meter along perpendicular direction of the force. What amount work is done?

A: 50 Joule

B: 15 Joule

C: 5 Joule

D: 0 Joule

Q.20 Joule/second is related to –

A: Watt

B: Newton

C: Pascal

B: Torr

Q.21 A particle is thrown upward with some kinetic energy. What happened to its kinetic energy at the highest point or height it reaches.

A: Its kinetic energy is lost;

B: It's all kinetic energy is absorbed by the air;

C: Its kinetic energy is converted to potential energy;

D: Its kinetic energy is remain same;

Q.22 What is the formula of potential energy?

A: mv^2

B: mgh

C: mgh^2

D: ρgh

Q.23 What is the formula of kinetic energy?

A: $(1/2)mv^2$

B: mv^2

C: mgh

D: $p\,dv$

Q.24 When a body falls from a height, its total mechanical energy remain same. The statement is –

A: True

B: False

Answer

1	a		13	a
2	c		14	d
3	a		15	b
4	a		16	c
5	a		17	a
6	b		18	a
7	b		19	d
8	a		20	a
9	a		21	c
10	d		22	b
11	c		23	a
12	a		24	a