

1. SI unit of current is

- (a) Ampere
- (b) Volt
- (c) Coulomb
- (d) None of these

Correct Answer : (A)

2. Which is wrong statement about isobaric process

- (a) Pressure is constant
- (b) Follows the charles law
- (c) Heat absorbed is not zero
- (d) Work done is zero

Correct Answer : (D)

3. Magnetic field due to a coil of radius r is B . If radius is halved then magnetic field will be

- (a) B
- (b) $2B$
- (c) $B/2$
- (d) $4B$

Correct Answer : (B)

4. Radius of two spherical capacitor are a & b respectively. If their potentials are equal then ratio of charges will be.

- (a) a/b
- (b) b/a
- (c) $1 : 1$
- (d) None of these

Correct Answer : (A)

5. Which is the correct output of NOR gate

- (a) $A+B$
- (b) $A \cdot B$
- (c) $\overline{A+B}$
- (d) $\overline{A \cdot B}$

Correct Answer : (C)

6. Ratio of time taken by a freely falling body to cover the distance h & $2h$ is

- (a) $1 : 1$
- (b) $1 : 2$
- (c) $1 : \sqrt{2}$
- (d) $\sqrt{2} : 1$

Correct Answer : (C)

7. Energy stored in EM-Wave is due to
- (a) Only electric field
 - (b) Only magnetic field
 - (c) Both a & b
 - (d) None of these

Correct Answer : (C)

8. The value of ϵ_0 is
- (a) 8.84
 - (b) 8.84×10^{-11}
 - (c) 1
 - (d) ∞

Correct Answer : (B)

9. Water is heated from 0°C - 20°C then what will happen to its volume.
- (a) Remain constant
 - (b) Increases
 - (c) Decreases
 - (d) First decreases then increases

Correct Answer : (D)

10. Correct relation for Torque is.
- (a) $\vec{\tau} = \vec{r} \times \vec{F}$
 - (b) $\vec{\tau} = m\vec{r}$
 - (c) $\vec{\tau} = I\vec{\alpha}$
 - (d) None

Correct Answer : (A)

11. Dimension of pressure is
- (a) ML^2T^{-2}
 - (b) $\text{ML}^{-1}\text{T}^{-2}$
 - (c) $\text{ML}^{-1}\text{T}^{-1}$
 - (d) None of these

Correct Answer : (B)

12. What does magnetic susceptibility represent.

- (a) Sensitivity for magnetic field.
- (b) magnetic stability
- (c) magnetic instability
- (d) None of these

Correct Answer : (A)

13. If refractive index of medium is 1.414 the critical angle of medium is

- (a) 45°
- (b) 30°
- (c) 60°
- (d) None of these

Correct Answer : (A)

14. Light travels from one medium to another medium, then wave length

- (a) Increases
- (b) Decreases
- (c) Remain same
- (d) May increase or decrease

Correct Answer : (D)

15. What does Area bounded by B-H curve give

- (a) Power
- (b) magnetic field
- (c) Energy loss
- (d) None of these

Correct Answer : (C)

16. When a rod moves in a uniform magnetic field the induced emf will be

- (a) Blv (b) Blv/R
(c) Bli (d) None of these

Correct Answer : (A)

17. A water tanker is accelerated uniformly

- (a) Will move backward
(b) will move forward
(c) will remain level
(d) Nothing can be said.

Correct Answer : (A)

18. Three equal charges are placed at vertices of an equilateral triangle then the ratio of forces acting between charges is

- (a) 1 : 2 (b) 2 : 1
(c) 1 : 1 (d) None of these

Correct Answer : (C)

19. How does resistance change when resistivity is reduced

- (a) Increases
(b) Decreases
(c) remain same
(d) None of these

Correct Answer : (B)

20. Energy present at mean position of a pendulum is

- (a) Only potential energy
(b) Only kinetic energy
(c) Both a & b
(d) None of these

Correct Answer : (B)

21. At what height from earth's surface the value of g becomes $1/16^{\text{th}}$ of present

- (a) $3R$ (b) $7R$
(c) $6R$ (d) R

Correct Answer : (A)

22. If in a process $w = 0$ then by decreasing heat what happens to temperature

- (a) Increases
(b) Decreases
(c) Remain same
(d) None of these

Correct Answer : (B)