

Class: IX

Subject: Physics

Topic: Physical World And Measurement

No. of Questions: 20

Duration: 60 Min

Maximum Marks: 60

Q1. Unit of latent heat is

- (a) J kg^{-1}
- (b) J mol^{-1}
- (c) N kg^{-1}
- (d) N mol^{-1}

Ans: a

Q2. Dyne-sec is the unit of

- (a) Momentum
- (b) Force
- (c) Work
- (d) Angular momentum

Ans: a

Q3. One torr is equal to

- (a) 1 cm of Hg col.
- (b) Atmosphere
- (c) 1 N m^{-2}
- (d) 1 mm of Hg col.

Ans: d

Q4. What is the unit of magnetic permeability?

- (a) $\text{Wb A}^{-1}\text{M}^{-2}$
- (b) $\text{Wb}^{-1} \text{ Am}$
- (c) Wb A m^{-1}

(d) $\text{Wb A}^{-1} \text{m}$

Ans: a

Q5. The ampere-second is a unit of

- (a) Current
- (b) Charge
- (c) Energy
- (d) Power

Ans: b

Q6. The SI unit of coefficient of mutual inductance of a coil is

- (a) Henry
- (b) Volt
- (c) Farad
- (d) Weber

Ans: a

Q7. Electron volt is a unit of

- (a) Potential difference
- (b) Charge
- (c) Energy
- (d) Capacity

Ans: c

Q8. Which is dimensionless?

- (a) Force/acceleration
- (b) Velocity/acceleration
- (c) Volume/area
- (d) Energy/work

Ans: d

Q9. Potential is measured in

- (a) Joules/coulomb
- (b) Watt/coulomb
- (c) Newton-second
- (d) None of these

Ans: a

Q10. SI unit pressure is

- (a) Atmosphere
- (b) Bar
- (c) Pascal
- (d) Mm of Hg

Ans: c

Q11. Which physical quantities have same dimension?

- (a) Moment of couple and work
- (b) Force and power
- (c) Latent heat and specific heat
- (d) Work and power

Ans: a

Q12. Which of the following systems of units is not based on units of mass, length and time alone?

- (a) SI
- (b) MKS
- (c) CGS
- (d) FPS

Ans: a

Q13. SI unit of magnetic flux is

- (a) Gauss
- (b) Weber
- (c) Oersted

(d) Ampere/metre

Ans: b

Q14. Subtract 0.2 J From 7.26 J and express the result with correct number of significant figures

- (a) 7.1 J
- (b) 7.06 J
- (c) 7.0 J
- (d) 7 J

Ans: a

Q15. When 97.52 is divided by 2.54 the correct result is

- (a) 38.3937
- (b) 38.394
- (c) 38.39
- (d) 38.4

Ans: d

Q16. S.I. unit of surface tension is

- (a) Degree/cm
- (b) N/m
- (c) N/m²
- (d) N m

Ans: b

Q17. Weber/m² is equal to

- (a) Tesla
- (b) Henry
- (c) Watt
- (d) None

Ans: a

Q18. Which of the following is not the name of a physical quantity?

- (a) Displacement
- (b) Momentum
- (c) Metre
- (d) Torque

Ans: c

Q19. Watt-hour meter measures

- (a) Current
- (b) Voltage
- (c) Power
- (d) Electric energy

Ans: d

Q20. The number of significant figures in 0.00060 m is

- (a) 1
- (b) 2
- (c) 3
- (d) 4

Ans: b