

Physics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	A piece of fuse wire melts when a current of 15 ampere flows through it. With this current, if it dissipates 22.5 W. the resistance of fuse wire will be	A. Zero B. 10Ω C. 1Ω D. 0.10Ω
2	Two electric bulbs of 200 W and 100 W have same voltage. If R1 and R2 be their resistance respectively then	A. $R_1 = 2R_2$ B. $R_1 = 4R_2$ C. $R_1 = R_2$ D. $R_1 = 2R_2$
3	Which of the following is a scalar quantity	A. Density B. Displacement C. Torque D. Weight
4	In an L-R circuit time constant is that time in which current grows from zero to the value	A. $0.63 I$ B. $0.50 I$ C. $0.73 I$ D. I
5	What remains constant when the earth revolves around the sun?	A. Angular momentum B. Linear momentum C. Angular kinetic energy D. Linear kinetic energy
6	A pendulum clock set to give correct time in Karachi is taken to Quetta it would give correct time if	A. The mass of the pendulum is increased B. The mass of the pendulum is decreased C. The length of the pendulum is increased D. The length of the pendulum is decreased
7	In a capacitive circuit	A. Current leads voltage by phase of $\pi/2$ B. Voltage leads current by phase of $\pi/2$ C. Current and voltage are in same phase D. Sometime current and sometime voltage leads
8	The direction of induced current is such that it opposes the very cause that has produced it. This is the law of	A. Lenz B. Faraday C. Kirchoff D. Fleming
9	A person standing on a rotating platform has his hands lowered. He suddenly outstretches his arms. The angular momentum	A. Becomes zero B. Increases C. Decreases D. Remains the same
10	Center of mass is a point	A. Which is geometric center of a body B. From which distance of particles are same C. Where the whole mass of the body is concentrated D. Where the center of gravity is

is supposed to be centered

D. Which is the origin of reference frame

11 A sun rise or sun set, the sun looks reddish because.

- A. The sun is coldest at these times
- B. Of the effects of reflection and refraction
- C. The sun is hottest at these times
- D. Of the scattering of light

12 Choose the correct statement

- A. Both an ammeter and voltmeter should have small resistance
- B. Both an ammeter and a voltmeter should have large resistance
- C. An ammeter should have large resistance and a voltmeter should have small resistance
- D. An ammeter should have small resistance and a voltmeter should have large resistance

13 Which of the following sources give discrete emission spectrum?

- A. Incandescent electric bulb
- B. Sun
- C. Mercury vapour lamp
- D. Candle

14 If in a moving coil galvanometer a current i produces a deflection θ then

- A. $i \propto \tan \theta$
- B. $i \propto \theta^2$
- C. $i \propto \theta$
- D. $i \propto \sqrt{\theta}$

15 The volt/metre is the unit of:

- A. Potential
- B. Work
- C. Force
- D. Electric field intensity

16 Surface tension of water is due to

- A. Inter molecular attraction
- B. Intermolecular spaces
- C. Inter molecular repulsion
- D. None of above

17 The magnetic moment of a circular coil carrying current is

- A. Directly proportional to the length of the wire in the coil
- B. Inversely proportional to the length of the wire in the coil
- C. Directly proportional to the square of the length of the wire in the coil
- D. Inversely proportional to the square of the length of the wire in the coil

18 A ten-ohm electric heater operates on a 110 V line Calculate the rate at which it develops heat in watts:

- A. 1310 W
- B. 670 W
- C. 810 W
- D. 1210 W

19 A particle moving in a magnetic field has increase in its velocity then its radius of the circle

- A. Decreases
- B. Increases
- C. Remains the same
- D. Becomes half

20 The minimum wavelength of the X-rays produced by electrons accelerated through a potential difference of V volts is directly proportional to

- A. \sqrt{V}
- B. V^2
- C. $1/\sqrt{V}$
- D. $1/V$