

## Physics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	To explain his theory Bohr used	A. Conservation of linear momentum B. Conservation of angular momentum C. Conservation of quantum frequency D. Conservation of energy
2	Which quantity is increased in step-down transformer?	A. Current B. Voltage C. Power D. Frequency
3	Two bodies of masses $m_1$ and $m_2$ have equal momentum their kinetic energies $E_1$ and $E_2$ are in the ratio	A. $\sqrt{m_1}/\sqrt{m_2}$ B. $14.4444465637207px; m_1/m_2$ C. $14.4444465637207px; m_1/m_2$ D. $14.4444465637207px; m_1/m_2$
4	Huygen's wave theory of light cannot explain	A. Diffraction B. Interference C. Polarization D. Photoelectric effect
5	Two masses of 1 g and 4 g are moving with equal kinetic energies The ratio of the magnitudes of their linear moments is:	A. 4 : 1 B. $\sqrt{2} : 1$ C. 1 : 2 D. 1 : 16
6	A charge Q is divided into two parts q and $Q - q$ and separated by a distance R. the force of repulsion between them will be maximum when:	A. $q = Q/4$ B. $q = Q/2$ C. $q = Q$ D. None of these
7	Two electric bulbs of 200 W and 100 W have same voltage.If $R_1$ and $R_2$ be their resistance respectively then	A. $R_1 = 2R_2$ B. $R_1 = R_2$ C. $R_1 = 4R_2$ D. $R_1 = 4R_2$
8	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
9	A motorist travels A to B at a speed of 40 km/h and returns at speed of 60 km/h. His	A. 40 km/h B. 48 km/h C. 50 km/h

average speed will be:

C. 50 km/h  
D. 60 km/h

10 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

11 A train of 150 m length is going towards north direction at a speed of  $10 \text{ ms}^{-1}$  A parrot flies at a speed of  $5 \text{ ms}^{-1}$  towards south direction parallel to the railway track, The time taken by the parrot to cross the train is equal to

A. 12 s  
B. 8 s  
C. 15 s  
D. 10 s

12 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

13 According to the Hooke's law the force required to change the length of a wire by '1' is proportional to

A.  $1 <sup>2 </sup>$   
B.  $1 <sup>1 </sup>$   
C. 1  
D.  $1 <sup>2 </sup>$

14 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.  $10 \Omega$   
C.  $1 \Omega$   
D.  $0.10 \Omega$

15 If the metal bob is a simple pendulum is replaced by a wooden bob, then its time period will

A. Increase  
B. Decreases  
C. Remain the same  
D. First 'A' then 'B'

16 Shunt required in an ammeter of resistance R to decrease its deflection from 30 ampere to 10 ampere is

A.  $R/4$   
B.  $R/3$   
C.  $R/2$   
D. R

17 Which one of the following is a simple harmonic motion?

A. Wave moving through a string fixed at both ends.  
B. Earth spinning about its own axis  
C. Ball bouncing between two rigid vertical walls  
D. Particle moving in a circle with uniform speed.

18 A photocell with a constant p.d of V volt across it illuminated by a point source from a distance of 25 cm. When the source is moved to a distance of 1 m, the electrons emitted by the photocell

A. Carry 1/4th their previous energy  
B. Are 1/6th as numerous as before  
C. Are 1/4th as numerous as before  
D. Carry 1/4th their previous momentum

19 In which of the following states does the incandescent substance give continuous spectrum?

A. Vapours in atomic state  
B. Vapours in molecular state  
C. Solid or fluid in bulk state  
D. Solid or fluid in plasma state

20 In an L-R circuit time constant is that time in which current grows from zero to the value

A.  $0.63 I_{\infty}$   
B.  $14.4444465637207 \times 10^{-5}$   
C.  $14.4444465637207 \times 10^{-6}$   
D.  $14.4444465637207 \times 10^{-7}$