

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	In case of point, source of light shape of wavefront is:	A. Spherical B. Cylindrical C. Plane D. None of these
2	Radium was discovered by:	A. Becquerel B. Marie curie C. Pierre curie D. Rutherford E. Both (B) and (C)
3	Work done is maximum when angle between force and displacement is	A. 0° B. 90° C. 180° D. None of these
4	In a building, there are 15 bulbs of 40 watts, 5 bulbs of 100 watts, 5 fans of 80 watts and a heater of 1 kilowatt. The voltage of the electric main is 220 volts. The minimum efficiency of the main fuse of the building will be	A. 0.4 A B. 11.4 A C. 9.8 A D. 10.6 A
5	According to the special theory of relativity, time is	A. absolute quantity B. not absolute quantity C. constant quantity D. none of these
6	Beta particles are	A. hydrogen nuclei B. helium nuclei C. electrons D. photons
7	At absolute temperature, the kinetic energy of the molecules	A. Becomes zero B. Becomes maximum C. Becomes minimum D. Remain constant
8	In full wave rectification, simultaneous action is that:	A. Two diodes conduct and two do not. B. One diode conduct and three do not. C. Three diodes conduct and one does not. D. All the four diodes conduct E. None of these
9	In a resonance situation the amplitude of the motion may become extra ordinarily large, if	A. the driving force is large B. the driving force is zero C. the driving force may be feeble D. all of them
10	Fire fighters have jet attached to the head of their water pipes in order to	A. Increase the mass of water flowing per second B. Increase the velocity of water flowing out C. Increase the volume of water flowing per second D. Avoid wastage of water
11	When the different streamlines cannot cross each other, then this condition is known as	A. continuity condition B. turbulent flow condition C. steady flow condition D. none of them
12	If the radius of first orbit of hydrogen atom is 0.53° A the radius of second orbit will be	A. 2.120° A B. 0.212° A C. 21.2° A D. 0.14° A

13 The resonance will be sharp, if the amplitude decreases rapidly at a frequency

A. equal to the resonant frequency
B. slight different from the resonant frequency
C. greatly different from the resonant frequency
D. any one of them

14 The waveform of alternating voltage is a:

A. Square
B. Rectangular
C. Saw-tooth
D. Sinusoidal
E. None of these

15 A rheostat can be used:

A. As variable resistor
B. As potential divider
C. For varying the current
D. All of these
E. None of these

16 The value of the input resistance of OP-AMP is of the order of

A. few ohms
B. few hundred ohms
C. several kilo ohms
D. several mega ohms

17 The smallest three dimensional basic structure is called as:

A. An atom
B. Unit cell
C. Crystal lattice
D. Polymer
E. None of these

18 Work is a:

A. Scalar quantity
B. Vector quantity
C. Base quantity
D. None of these

19 All the valence electrons present in a crystal of silicon are bound in their orbits by

A. Ionic bond
B. covalent bond
C. Molecular bond
D. Both (A) and (B)
E. Both (B) and (C)

20 Which one of the following relations is correct?

A. $1 \text{ Wb} \cdot \text{m}^2 = \text{Nm}^{-1}$
B. 1 tesla = 104 gausses
C. $1 \text{ Wb} \cdot \text{m}^2 = 1 \text{ tesla}$
D. All of the above
