

ECAT Pre General Science MCQ's Test For Physics Full Book

Sr	Questions	Answers Choice
1	Which one of the following could be the frequency of ultraviolet radiation?	A. 1.0×10^6 Hz B. 1.0×10^9 Hz C. 1.0×10^{12} Hz D. 1.0×10^{15} Hz
2	The term Brownian movement refers to	A. irregular motions of small particles suspended in a fluid B. convection currents in a liquid or gas C. convection currents in a gas but not in a liquid D. the stretching of a body beyond its elastic limit
3	The blood pressure of a person	A. decrease with age B. increase with age C. has no effect with age D. none of them
4	One joule is equal to	A. 1.6×10^{19} eV B. 6.25×10^{18} eV C. 1.6×10^{18} eV D. 6.25×10^{19} eV
5	The SI unit of spring constant is identical with that of	A. Force B. Surface tension C. Pressure D. Loudness
6	The magnitude of the force producing an acceleration of 10 m/sec^2 in a body of mass 500 grams is:	A. 3 N B. 4 N C. 5 N D. 6 N
7	The ratio of average e.m.f in the coil to the time rate of change of current in the same coil is called	A. Mutual induction B. Mutual inductance C. Capacitance D. Self inductance
8	Rate of decay is actually described by.	A. Half line B. Decay constant C. Mean life D. Total life E. None of these
9	The rear wheels of an automobile are rev/sec which is reduced to 38 rad/sec in 5 seconds when brakes are applied. Its angular acceleration is:	A. 5 rad/sec^2 B. -10 rad/sec^2 C. -10 rad/sec^2 D. -5 rad/sec^2
10	A tube tapers from 20 cm diameter to 2 cm, the velocity at first cross-section is 50 ms^{-1} then velocity at second cross-section is	A. 5000 cms^{-1} B. 500 cms^{-1} C. 50 cms^{-1} D. 0.5 cm/s
11	A magnetic force on an electron travelling with 10^8 ms^{-1} parallel to a field of strength 1 Wb m^{-2} is	A. Zero B. 10^5 m C. 10^{-10} N D. 10^8 N
12	Work done is lowering the bucket into the well is:	A. Zero B. Positive C. Negative D. None of these
13	When a body moves with a constant speed in a circle:	A. No work is done on it B. No acceleration is produced in the body C. Velocity remains constant D. None of these
14	When the object lies between F and 2F, the image formed by is formed at:	A. Virtual B. Diminished C. Erect D. None of these

D. Keal

15 A relationship between Gauss of magnetic induction and Tesla(T) is given by

- A. $G = 10^{-3} T$
- B. $G = 10^{-2} T$
- C. $G = 10^{-4} T$
- D. $G = 10^{-1} T$

16 Ohm is the unit of

- A. current
- B. capacitance
- C. energy
- D. resistance

17 In RC series circuit the time during which the capacitor acquires 0.63 times the equilibrium charge is called

- A. Time constant
- B. Decay constant
- C. None of these
- D. All of above

18 The impedance of RLC series resonance circuit at resonant frequency is

- A. Greater than R
- B. Equal to R
- C. Less than R
- D. None of these

19 In metallic crystals which of the following thing remains constant

- A. amplitude of oscillations
- B. temperature of solid
- C. average atomic positions
- D. all of them

20 On heating, glass gradually softens into a paste like before it becomes a very viscous liquid at almost

- A. $600^{\circ} C$
- B. $7600^{\circ} C$
- C. $800^{\circ} C$
- D. $900^{\circ} C$