

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The rate of decay of a radioactive substance	<p>A. decrease exponentially with time</p> <p>B. decreases linearly with time</p> <p>C. increases linearly with time</p> <p>D. increases exponentially with time</p>
2	Which one of the followings can act approximately as a source of monochromatic light	<p>A. Neon lamp</p> <p>B. Fluorescent tube</p> <p>C. Sodium lamp</p> <p>D. None of these</p>
3	A tight wire is clamped at two points 2.0 m apart. It is plucked near one end. Which are the three longest wavelengths present on the vibrating wire.	<p>A. 2.0 m, 1m, 0.67 m</p> <p>B. 4.0 m, 2.0 m, 1m</p> <p>C. 4.0 m, 2.0 m, 1.33 m</p> <p>D. 1m, 0.5 m, 0.33 m</p>
4	Nucleus consists of	<p>A. proton and neutron</p> <p>B. protons and electron</p> <p>C. electron and neutron</p> <p>D. protons only</p>
5	The instrument which detects the instant at which external pressure becomes equal to the systolic pressure is	<p>A. stethoscope</p> <p>B. thermometer</p> <p>C. manometer</p> <p>D. barometer</p>
6	Waves transport energy	<p>A. without transport energy</p> <p>B. with matter</p> <p>C. both of them</p> <p>D. none of them</p>
7	A line which represents the direction of travel of a wave is known as:	<p>A. Spherical Wavefront</p> <p>B. Locus</p> <p>C. Ray</p> <p>D. Either B or C</p>
8	Work done on a body by gravity in lifting it up to certain height is	<p>A. Maximum</p> <p>B. Minimum</p> <p>C. Zero</p> <p>D. Negative</p>
9	A 60 W bulb operates on 220 V supply. The current flowing through the bulb is	<p>A. 11/3 A</p> <p>B. 3 A</p> <p>C. 3/11 A</p> <p>D. 6</p>
10	In an N-type silicon, which of the following statement is true	<p>A. Electrons are majority carriers and trivalent atoms are the dopants</p> <p>B. Electrons are minority carriers and pentavalent atoms are the dopants</p> <p>C. Holes are minority carriers and pentavalent atoms are the dopants</p> <p>D. Holes are majority carriers and trivalent atoms are the dopants</p>
11	Alfa particles are	<p>A. hydrogen nuclei</p> <p>B. helium nuclei</p> <p>C. electrons</p> <p>D. photons</p>
12	Acceleration in a body is always produced in the directin of:	<p>A. Velocity</p> <p>B. Weight</p> <p>C. Force</p> <p>D. Botha B and C</p>
		<p>A. Neutrons</p> <p>B. Mesons</p>

13	An inkjet printer uses in its operation:	<p>C. Positrons and photons</p> <p>D. An electric charge</p> <p>E. None of these</p>
14	Energy required by an electron revolving in certain orbit to jump to an excited state is called:	<p>A. Ionization energy</p> <p>B. Ionization potential</p> <p>C. Excitation energy</p> <p>D. Excitation potential</p> <p>E. None of these</p>
15	Gauss(G) is smaller unit of magnetic induction which is related to tesla(T) as	<p>A. $1\text{T} = 10^4\text{G}$</p> <p>B. $1\text{T} = 10^5\text{G}$</p> <p>C. $1\text{T} = 10^3\text{G}$</p> <p>D. $1\text{T} = 10^4\text{G}$</p>
16	Huygen principle is used to determine:	<p>A. Speed of light</p> <p>B. Location of wavefront</p> <p>C. About polarized or unpolarized light</p> <p>D. None of them</p>
17	A spring of constant $k = 0.4\text{ N m}^{-1}$ is to be extended through 10 cm at a place where $g = 10\text{ m sec}^{-2}$. The mass to be suspended should be:	<p>A. 4 gms</p> <p>B. 0.4 gms</p> <p>C. 40 gms</p> <p>D. None of these</p>
18	If we plot graph between potential difference (V) and current (I) obeying ohm's law, it will give us	<p>A. parabola</p> <p>B. straight line</p> <p>C. hyperbola</p> <p>D. ellipse</p>
19	When a dielectric material is introduced between the plates of a charged condenser the electric field between the plates	<p>A. Decreases</p> <p>B. Increases</p> <p>C. No change</p> <p>D. May increase or decrease</p>
20	The time required to complete one vibration is called	<p>A. frequency</p> <p>B. total time</p> <p>C. time period</p> <p>D. velocity</p>