

PPSC Physics Full Book

Sr	Questions	Answers Choice
1	During the alpha decay process	A. A neutron is emitted B. a electron is emitted C. A helium core is emitted D. A proton core is emitted
2	A body moves with velocity of 2×10^6 m s ⁻¹ its relativistic mass becomes	A. Zero B. Unity C. Double of its rest mass D. Infinity
3	Which of the following is invariant under Galilean transformation.	A. Velocity B. Impulse C. Momentum D. Distance
4	The division and germier experiment relates to	A. Diffusion B. interference C. Polarization D. Electron diffraction
5	Cosmic rays mostly comprise of	A. Neutral particles B. Negative charged particles C. Positively charged particles D. Ions
6	Which experiment confirmed the de Broglie hypothesis.	A. Double slit experiment B. Division germier experiment C. Schrodinger's Cat experiment D. Bohr's experiment
7	The energy in electron volts necessary to remove the most loosely bound electron from the neutral atom is known as.	A. Faraday energy B. Wave number C. Ionization Potential D. Excitation potential
8	Ionization of a hydrogen atom originally in its ground state takes a minimum out of energy equal to.	A. 2.4 J B. 4.2 J C. 12.3 eV D. 13.6 eV
9	The angular speed of an electron in the nth orbit of Bohr's hydrogen atom is.	A. Directly proportional to n B. Directly proportional to n ² C. Inversely proportional to n D. Inversely proportional to n ²
10	LASER beam may be measure very large distance because it is.	A. Indirectional B. coherent C. Monochromatic D. Not absorbed
11	The usefulness of X rays is largely due to their	A. Mass B. Density C. Volume D. Penetrating power
12	What is the scale for measurement of Bainbridge mass spectrograph.	A. Linear B. Inverse C. Exponential D. Logarithmic
13	What is the relativistic version of the Schrodinger equation.	A. Klein Gordon equation B. Laplace equation C. Quadratic equation D. Binomial equation.
14	The energy equivalent of 1 kg of matter is	A. 10^{15} J B. 1 J C. 10^{12} J D. 10^{17} J
15	In de Broglie model electron orbit must form	A. Spectrum B. Wave packets C. Fraunhofer lines D. Clouds

16	The electron behave an waves because	A. They can be diffracted by a crystal B. They can produce ions in gases C. They can be deflected by magnetic field D. They can be deflected by electric field
17	When using the formula $E = h \lambda$ what unit should energy have.	A. Joule B. Watt second C. Newton metre D. Electron volt
18	The most convenient unit for energy at the atomic level is.	A. Joule B. Watt second C. Newton metre D. Electron volt
19	Which particle is removed by a photon.	A. Quark B. Electron C. Proton D. Neutron
20	The splitting of atomic energy levels and the associated spectrum lines when the atoms are placed in a magnetic field is called.	A. The photoelectric effect B. The zeeman effect C. The Compton effect D. Quantum effect
21	The exitance of more than one distinct state with the same energy is called.	A. Exigency B. Degeneracy C. Normally D. Emergency
22	Which experiment is a demonstration that matter and energy can display properties of both waves and particles.	A. young's double slit experiment B. Division germier experiment C. Heisenberg's uncertainty experiment D. Stern Gerlach experiment
23	Most widely used types of gas LASER are	A. Neon B. Argon ion C. Helium D. All of these
24	LASER is a device which can produce.	A. Monochromatic beam of light B. Coherent beam of light C. An intense beam of light D. All of the above
25	In an electronic transition atom cannot emit	A. Gama rays B. Visible rays C. Infrared rays D. Ultraviolet rays
26	The total energy of an electron in an orbit around the nucleus is.	A. Zero B. Unity C. Infinity D. Negative
27	The Inner electrons in heavy atoms can be disturbed and dislodged by.	A. X rays B. Alpha particle C. Beta particles D. gama particles
28	In the experiment of production of X rays electrons are accelerated towards the anode by	A. Thermionic emission B. Potential difference C. Breaking potential D. Cut of current
29	In heavy atims the electrons are assumed to be arranged in.	A. Elliptical shells B. Inner shells C. Concentric shells D. Outer shells
30	The continuous x rays spectrum is obtained due to	A. Deceleration of impact electrons B. Breaking potential C. Excitation potential D. Ionization potential