

PPSC Physics Topic 7 Modern Physics

Sr	Questions	Answers Choice
1	The mass of proton is equal to.	A. 1.673×10^{-27} kg B. 1.673×10^{-27} kg C. 9.1×10^{-31} kg D. 9.1×10^{-31} kg
2	The input resistance of a JFET is of the order of.	A. 1 M Mega B. 10 M Mega C. 100 M Mega D. 1,000 M Mega
3	Though the wavelength of X-rays is smaller than that of visible light yet the speed of X-rays in vacuum is.	A. longer than that of visible light B. Smaller than that of visible light C. Same as that of visible light D. Unpredictable
4	Particle which can be added to the nucleus of an atom with changing its chemical properties are called.	A. Electrons B. Protons C. Neutrons D. Alpha particles
5	The ionization energy for hydrogen atom is	A. -11.6 eV B. -12.6 eV C. -13.6 eV D. -19.6 eV
6	A spectroscope sorts out	A. Atoms B. Molecules C. Elements D. Isotopes
7	An important property of an ideal power supply is.	A. Infinite internal resistance B. Zero internal resistance C. Large output resistance D. Small output resistance
8	An example of continuous spectrum is.	A. Black body radiation spectrum B. Molecular spectra C. Atomic spectra D. All of the above
9	The most readily fissionable isotope of uranium has atomic mass of	A. 234 B. 235 C. 236 D. 238
10	When Be is bombarded by alpha particles, then we obtain	A. electron B. Proton C. Positron D. Neutron
11	Lines of Balmer series are emitted by hydrogen atom when the electron jumps from	A. The first orbit to any other orbit B. Higher orbits to second orbit C. Higher orbits to first orbit D. The third orbit to higher orbit
12	The back ground radiation in the atmosphere on the average is	A. 0.5 Sv per year B. 1.0 Sv per year C. 1.5 Sv per year D. 2.0 Sv per year
13	A darling ion amplifier is characterized by	A. High voltage and current gain B. High input resistance and current gain C. High output resistant and current gain D. Low input resistance and current gain
14	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

15 Which of the following causes the deflection of Alpha particles when they are passed through a thin foil.

A. Attraction of nucleus
B. Collision with nuclei
C. Interactions with electrons
D. **Electrostatic repulsion by the nucleus**

16 The charge on a helium nucleus is equal to the charge of.

A. Two electrons
B. **Two protons**
C. Two neutrons
D. One proton

17 Which of the following can be used as an arrester in a nuclear reactor.

A. Graphite
B. heavy water
C. Uranium
D. **Cadmium**

18 Negative feedback

A. Increases stability
B. Decreases stability
C. Produces oscillatory
D. Cannot occur

19 Why FET amplifiers are called voltage controlled devices.

A. Input is a current signal
B. Output is a current signal
C. **Input is a voltage signal**
D. Output is a voltage signal

20 An operational amplifier can be used as a

A. Comparator
B. Night switch
C. Inverting and non inverting amplifier
D. **All of the above**
