

## PPSC Physics Topic 7 Modern Physics

Sr	Questions	Answers Choice
1	Which of the following detectors can count fast and operate at low voltage.	A. G.M Counter B. Cloud chamber C. Solid state detector D. Bubble chamber
2	Bohr's atomic model assumes	A. Nucleus is of infinite mass and is at rest B. electron in a quantized orbit will not radiate energy C. Mass of electron remains the same D. All of the above
3	The phenomenon is which the wavelength of scattered X-rays is larger than the incident X-rays is known as.	A. Zeeman's effect B. Photoelectric effect C. Compton's effect D. Annihilation of matter
4	Radio carbon in the atmosphere is produced by the bombardment of.	A. Oxygen by high energy neutrons B. Oxygen by high energy protons C. Nitrogen by high energy protons D. Nitrogen by high energy neutrons
5	Which one of the following is a neutron absorber	A. Pb B. Cd C. Cu D. Ag
6	Which one the following is not a component of a Bipolar junction Transistor	A. Base B. Emitter C. Collector D. Grid
7	An example of continuous spectrum is.	A. Black body radiation spectrum B. Molecular spectra C. Atomic spectra D. All of the above
8	Mosley's law establishes the X-rays fluorescence of target element with is.	A. Atomic weight B. Atomic number C. Density D. Lattice constant
9	Which circuit elements has two stable states and can be used to store information.	A. Flip flop or latch B. Logic gate C. Oscillator D. Amplifier
10	The emission of photons by a metal when electrons are incident is called.	A. Photo electric effect B. Pair production C. X-rays production D. Gama ray production
11	Both xenon and cesium each have	A. 24 isotopes B. 28 isotopes C. 32 isotopes D. 36 isotopes
12	The division and germier experiment relates to	A. Diffusion B. Interference C. Polarization D. Electron diffraction
13	Which of the following circuits is used as local oscillator in radio receivers.	A. AF oscillator B. Phase Local Loop C. RF oscillator D. All of the above
14	The radius of second orbit of hydrogen atom is	A. 0.071 A B. 0.142 A C. 4.752 A D. 9.5298 A

15	The mass of an alpha particle is.	<p>B. 4 u C. 6 u D. 8 u</p>
16	Which one of the following quantities is conserved in a nuclear reactor.	<p>A. Energy only B. Mass only C. Momentum only D. Mass energy and momentum</p>
17	Which of the following is formed by decay of a free neutron.	<p>A. A number of electrons B. Two protons C. A proton and an electron D. An alpha particle</p>
18	Alpha particles are	<p>A. Helium nuclei B. sodium nuclei C. ionized nuclei D. Hydrogen nuclei</p>
19	White light from a tungsten filament lamp is passed through sodium vapor and viewed through a diffraction grating. Which of the following best describes the spectrum which would be seen.	<p>A. Coloured lines on a black background B. Coloured lines on a white background C. Dark lines on a coloured background D. Dark lines on a white background</p>
20	Which one of the following has maximum frequency.	<p>A. Visible light B. Gamma rays C. Ultraviolet rays D. Infrared rays</p>