

## PPSC Physics Topic 7 Modern Physics

Sr	Questions	Answers Choice
1	The process of conversion of a photon into an electron and a positron is called.	A. Pair annihilations B. Pair production C. Photoelectric effect D. Compton effect
2	Mass-energy relation means that the product of mass times the square of the speed of light must be equal to.	A. Torque B. Momentum C. Energy D. Impulse
3	The usefulness of X rays is largely due to their	A. Mass B. Density C. Volume D. Penetrating power
4	Deuterium is	A. A transuranic element B. A type of cosmic particle C. An isotope of hydrogen D. An isotope of helium
5	Transistors with various combinations are widely used as switches in.	A. electric generators B. Rectifiers C. Amplifiers D. Computers
6	When using the formula $E = h \lambda$ what unit should energy have.	A. Joule B. Watt second C. Newton metre D. Electron volt
7	Which animal did Erwin Schrodinger contemplate using in his famous thought experiment.	A. mouse B. Cat C. Dog D. Rabbit
8	An AND gate is.	A. Equivalent to a series switching circuit. B. Equivalent to a parallel switching circuit C. Equivalent of universal gate D. A reciprocal of NAND gate
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	Radioactivity is the phenomenon associated with the.	A. Transition of radiowaves B. production of alpha particles only C. Decay of nucleus D. Reception of radio waves
11	The electrons behave as wave because.	A. They can be diffracted by a crystal B. They can be deflected by magnetic field C. They can be deflected by electric field D. they can produce ions in gases
12	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
13	The energy that must be added to separate the nucleus is called.	A. Critical energy B. Binding energy C. Gravitational energy D. Electrostatic energy
14	An operational amplifier have how many input terminals.	A. One B. Two C. Three D. Four

15	Which given element has lowest work function	A. Na B. Al C. si D. C
16	Which six particles and their antiparticles interact by the weak interaction.	A. Leptons B. Hadrons C. Muons D. pi mesons
17	In annihilation of matter, positron and electron pair disappears into two	A. Alpha particles B. Beta particles C. Gamma particles D. X-rays
18	Alpha particles are used for the treatment of skin of a patient due to.	A. Highly ionizing power B. Low penetration power C. Positively charged particles D. Helium nuclei
19	The most readily fissionable isotope of uranium has atomic mass of	A. 234 B. 235 C. 236 D. 238
20	The ionization potential of hydrogen atom is.	A. 10.2 V B. 13.6 V C. 12.97 V D. 27.2 V