PPSC Physics Topic 7 Modern Physics

Sr	Questions	Answers Choice
1	An emitter follower has	A. High input impedance and high output impedance B. High input impedance and low output impedance C. Low input impedance and low output impedance D. Low input impedance and high output impedance
2	Which uranium isotope having the atomic weights as given below is easily fissionable.	A. 234 B. 235 C. 236 D. 238
3	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 n2 C. Inversely proportional to n D. Inversely proportional to n2
4	An example of continuous spectrum is.	A. Black body radiation spectrum B. Molecular spectra C. Atomic spectra D. All of the above
5	An oscillator is basically an amplifier with loop gain	A. Zero B. Less than unity C. More than unity D. Infinity
6	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
7	When Be is bombarded by alpha particles, then we obtain	A. electron B. Proton C. Positron D. Neutron
8	The half life of radium -226 is	A. 1620 years B. 45 x 10⁹ years C. 3.8 days D. 23.5 minutes
9	In a Geiger Marsden experiment why do the great majority of the Alpha particles pass straight through the metal foil.	A. Atomic nuclei may contain neutrons B. Atoms are electrically neutral C. Atoms are largely empty space D. Atoms have positively charged nuclei
10	An increase in frequency above threshold frequency results in.	A. Increase in photo electric current B. Increase in K.E. of electrons C. Decrease in photoelectric current D. Decreases in K.E. of electrons
11	In n-p-n transistor the current flows in the direction from	A. Emitter to base B. emitter to collector C. Base to emitter D. Base to collector
12	A newly prepared radioactive nuclide has a decay constant Lamda of 10-6 s-1 What is the approximate half life of the nuclide.	A. 1 hour B. 1 day C. 1 week D. 1 month
13	X-rays spectrum may be	A. Continuous spectrum B. Discontinuous spectrum C. Line spectrum D. Continuous and line spectrum
14	An operational amplifier can be used as a	A. Comparator B. Night switch C. Inverting and non inverting

		amplifier D. All of the above
15	Emitter follower amplifier is an example of.	A. Current series feedback B. Voltage series feedback C. Current shunt feed back D. Voltage shunt feedback
16	Which of the following describes that the time interval between two events may be different in different of references	A. Simullaneously B. Time dilation C. Length contraction D. Mass variation
17	The energy equivalent of 1 kg of matter a	A. 10⁻¹⁵ J B. 1 J C. 10¹²J D. 10¹⁷ J
18	The continuous X rays spectrum is due to an effect.	A. Bremsstrahlung B. Breaking radiation C. Holography D. both a and b
19	Which one of the following has the largest wavelength.	A. x rays B. Infrared rays C. Visible light D. Radio waves
20	Which configuration is used to connect high impedance source to a low impedance lead.	A. CE B. CB C. CC D. BE