

## ECAT Pre General Science Online Test

Sr	Questions	Answers Choice
1	Consider a photon of continuous X-ray and a photon of characteristics X-ray of same wavelength. Which of the following is/are different for the two photons	A. Frequency B. Penetrating power C. Energy D. Method of creation
2	The emf is measured in:	A. Newton B. Volt C. J/C D. Both A and B E. Both B and C
3	The quantity having the same unit as that of emf is:	A. Force B. Energy C. Potential D. Current E. Charge
4	Which instrument is expensive and difficult to use?	A. Voltmeter B. Potentiometer C. CRO D. Both A and C E. Both A and B
5	An ideal voltmeter has:	A. Zero resistance B. Small resistance C. Large resistance D. Infinite resistance E. Both A and B
6	Kirchhoff's first rule is also called:	A. Loop rule B. Thumb rule C. Point rule D. Right hand rule E. None of these
7	X-rays produced in a tube operating at $10^5$ V. The speed of X-rays produced is	A. $3 \times 10^8$ m/s B. $3.1 \times 10^8$ m/s C. $2.8 \times 10^8$ m/s D. $1.88 \times 10^8$ m/s
8	The third band of the colour code:	A. Gives the number of zeroes B. Is decimal multiplier C. Gives the resistance tolerance D. Gives the third digit E. Both (A) and (B)
9	In helium Neon Laser Neon = 15% and Helium = 85% used. The lasing gas this unit is	A. Helium B. Neon C. Both D. None of these
10	A rheostat can be used:	A. As variable resistor B. As potential divider C. For varying the current D. All of these E. None of these
11	The value of the metastable state for Neon is	A. 20.66eV B. 20.61eV C. 19.23eV D. 18.70eV
12	In flesh, light element like carbon, hydrogen and oxygen predominate. Three elements allows _____ amount of incident X-ray to pass through them	A. Small B. Greater C. Equal D. Sometimes
13	The best conductor is:	A. Silver B. Copper C. Aluminium D. Both B and C E. None of them
14	X-rays are also known as	A. Roentgen rays B. Maxwell rays

		C. Plank range D. Einstein rays
15	As the current flows through the wire	A. It generates heat in the wire B. It produces sound in the wire C. Resistance of the wire decrease D. Voltage across the ends is the increase E. None of these
16	The minimum wavelength of X-rays produced of 1KV potential difference is applied across the anode and cathode of the tube is	A. $1.24 \times 10^{-10}$ m B. $7.92 \times 10^{-20}$ m C. $2.78 \times 10^{-14}$ m D. $3.88 \times 10^{-11}$ m
17	CT scanning is the abbreviated name of	A. Computed Technology B. Computed Technique C. Computed Technology D. Computerized Technique
18	The first shell near the neucles is	A. L-shell B. X-shell C. N-shell D. M-shell
19	The fourth band is a:	A. Silver band B. Red band C. Gold band D. Either A or C E. Either A or B
20	The life time of metastable state is equal to	A. Life time of excited state B. Greater than by excited state C. Zero D. Less than by excited state
21	We can excite an atom by	A. Bombardment of particles B. Radiating photons C. Providing potential difference D. All answer are true
22	The value of resistivity is the least for:	A. Copper B. Aluminium C. Silver D. Tungsten E. Iron
23	In a metal, the valence electrons are:	A. Attached to individual atoms B. Not attached to individual atoms C. Free to move within the metal D. Both A and B E. Both A and C
24	Ultraviolet region lies in _____ series	A. Layman B. Balmer C. P fund D. B racket
25	In gases, the charge carriers are:	A. Electrons B. Positive ions C. Negative ions D. Both A and C E. Both A and B
26	Graph of Black body radiation is example of	A. Band spectra B. Continuo's spectra C. Line spectra D. All
27	Photons must have energy equal to	A. $ev$ B. $En$ C. $hf$ D. None of these
28	In order to get interference using two light rays	A. The sources should be monochromatic and coherent B. The sources should have the same frequency C. Superposition should be linear D. All of these
29	The superposition of the two waves of same frequency and amplitude travelling in the same direction gives to an effect called	A. Diffraction B. Interference C. Polarization D. Dispersion
30	The locus of all points in a medium having same phase of vibration is called	A. Crest B. Trough C. Wavelength

