

## Physics ICS Part 2 Online MCQ's Test

Sr	Questions	Answers Choice
1	The Balmer series is obtained when all the transition of electrons terminate on	A. 1 <sup>st</sup> orbit B. 2 <sup>nd</sup> orbit C. 3 <sup>rd</sup> orbit D. 4 <sup>th</sup> orbit
2	For an atom of hydrogen atom the radius of the first orbit is given by:	A. $\frac{h}{m_e v}$ B. $\frac{m_e}{4h} v^2$ C. $\frac{h^2}{4m_e v^2}$ D. $\frac{h^2}{m_e v^2}$
3	If 13.6 eV energy is required to ionize the hydrogen atom, then the required energy to remove an electron from n=2 is:	A. 10.2 eV B. 0 eV C. 3.4 eV D. 6.8 eV
4	An electron microscope employs which one of the following particles?	A. Electron have a wave nature B. Electrons can be focused by an electric field C. Electrons can be focused by a magnetic field D. All of the above
5	We can never accurately describes all aspects of subatomic particles simultaneously. It is correct according to:	A. Uncertainty Principle B. De-broglie Theory C. Einstein Theory D. Photo electric effect
6	The positron has charge which is in magnitude equal to the charge on	A. Electron B. Proton C. $-\beta$ particle D. All
7	Pair production cannot take place in vacuum because :	A. Mass is not conserved B. Momentum is not conserved C. Energy is not conserved D. Charge is not conserved
8	Pair production occurs only when energy of photon is at least equal to:	A. 1.02keV B. 1.02 eV C. 1.02 MeV D. 1.02 GeV
9	A perfect absorber must also be perfect	A. Cavity B. Sources of radiation C. Radiator D. None of these
10	De-Broglie waves are associated with	A. Moving charged particles only B. Moving neutral particles only C. All moving particles D. All parties whether in motion or at rest
11	Einstein's Photoelectric equation is $E_k = hf - \phi$ in this equation $E_1$ , refers to:	A. K.E of all the emitted electrons B. Mean K.E of emitted electrons C. Maximum K.E of emitted electrons D. Minimum K.E of emitted electrons
12	If the kinetic energy of a free electron doubles, its de Broglie wavelength changes by the factor.	A. $\frac{1}{\sqrt{2}}$ B. $\frac{1}{2}$ C. $\sqrt{2}$ D. 2

C. 2  
D. 1/2

13 In a transistor, collector current is controlled by:

- A. Collector voltage
- B. Base current
- C. Collector resistance
- D. All of the above

14 In a transistor, collector current is controlled by:

- A. Collector voltage
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- D. All of the above

15 Most of the electrons in the base of an NPN transistor flow:

- A. Out of the base lead
- B. Into the collector
- C. Into the emit
- D. Into the base supply

16 When transistor are used in digital circuits they usually operate in the :

- A. Active region
- B. Break down region
- C. Saturation & cutoff regions
- D. Linear region

17 Improper bisting of a transistor circiut produces:

- A. Heavy loading of emitter current
- B. Distortion in the output output signal
- C. Excessive heat at collector terminal
- D. Faculty location of load line