

Gaining Apex Coaching Centre

(Where Toppers make..... Toppers)

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Assignment - I (10+1 CHEMISTRY)

CHAPTER - (STRUCTURE OF ATOM)

- 1) Electrons are emitted with zero velocity from metal surface when it is exposed to radiations of wavelength 6800Å. Calculate the threshold frequency and work function of the metal
- 2) How much energy is required to ionize a H atom if the electron occupies $n = 5$ orbit. Compare your answer with ionization energy of H atom (energy required to remove electron from $n=1$ orbit)
- 3) What are the postulates of Bohr Model of an atom?
- 4) What are the limitations of Rutherford model of atom?
- 5) Write the Electronic configuration of Copper and Chromium
- 6) Out of 4s and 3d, which is filled first and why?
- 7) Hydrogen atom contains only one electron yet there are so many spectral lines in their spectrum. Explain.
- 8) Is there any impact of Heisenberg Uncertainty principle in our daily life
- 9) Can all the four quantum numbers of two electrons of an atom be same. Explain
- 10) An electron is present in 4f sub-shell. Write the possible values of all the quantum numbers
- 12) When is the energy of an electron regarded as zero
- 13) Why can 2p sub-shell accommodate more electrons than 2s sub-shell
- 14) We do not see a car moving as a wave on the road. Explain
- 15) Does an electron follow a fixed circular path as suggested by Bohr?
- 16) The kinetic energy of an electron is 4.55×10^{-25} J. The mass of an electron is 9.1×10^{-31} Kg. Calculate the velocity, momentum and wavelength of the electron
- 19) What is the maximum number of emission lines when the excited electron of a hydrogen atom in $n = 6$ drops to the ground state
- 20) Explain Hund's rule of multiplicity
- 21) Fully filled and half filled configuration is always more stable than any other configuration. Explain
- 22) Write the electronic configuration of Fe^{2+} , Cr and Cu