***Que. : Estimate the minimum kinetic energy of non-relativistic electron confirmed in a region of width L=0.1nm?***

**Answer:**

* △x = L/2 = 10-10m./2
* △p .△x ≥ ħ/2
* △p minimum = ħ \*2/2\*1010
* P minimum = △p minimum.
* K.E. = P2/2m
* Minimum K.E = (P minimum)2/2m

= h2\*1020 \*4/16\*π \*2m

= 1.527 \*4 \* 10-19  J

***=3.792 eV***