The simple Bohr model is not applicable to He^4 atom because

A. He^4 is an inert gas.

B. He^4 has neutrons in the nucleus.

C. He^4 has one more electron.

D. electrons are not subject to central forces.

Answer:

The correct option of the mentioned problem is (c), (d) as,

The famous model of atomic structure proposed by Neil Bohr is only applicable to light atoms j=having only one electron revolving around the nucleus, and it is mostly used for H-atom. The electron must revolve around a nucleus which stationary and positively charged. It is also applicable for - H, He+, Li+2, Na+1 etc.

Because of having only one electron and electrons are not subjected to centripetal forces; thus, it is also applicable for He^4.