

Problem :- O₂ molecule consists of two oxygen atoms. In the molecule, nuclear force between the nuclei of the two atoms

- (a) is not important because nuclear forces are short-ranged.
- (b) is as important as electrostatic force for binding the two atoms.
- (c) cancels the repulsive electrostatic force between the nuclei.
- (d) is not important because oxygen nucleus have equal number of neutrons and protons.

Solution :- In case of oxygen molecule, the distance between atoms of oxygen is larger as compared to the distance between nucleons in a nucleus . So force between the nuclei of two oxygen atoms is not important as nuclear forces are short ranged forces. Hence correct answer is (a).