

**13. Which of the following statements in relation to the hydrogen atom is correct ? (2005)**

**(1) 3s orbital is lower in energy than 3p orbital**

**(2) 3p orbital is lower in energy than 3d orbital**

**(3) 3s and 3p orbitals are of lower energy than 3d orbital**

**(4) 3s, 3p and 3d orbitals all have the same energy**

Ans. 4) Auf-bau principle is not applicable for H atom