

Section (C)

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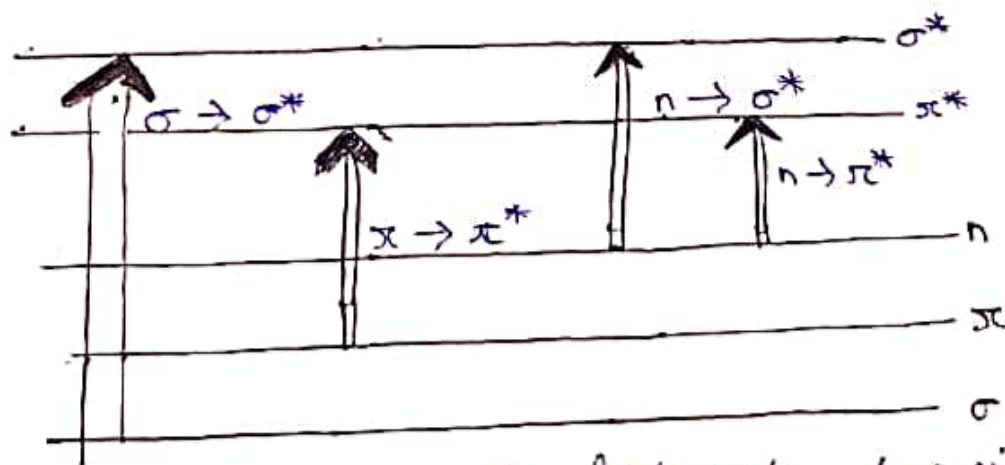
Discuss electronic transitions involved in UV Spectroscopy?

Ans

Electronic transition :- The absorption of UV or visible

radiation corresponds to the excitation of outer electrons. There are three types of electronic transition which can be considered, Transitions involving p, s and n electrons. Transitions involving charge-transfer electrons.

Molecular electronic transitions take place when electron in a molecule are excited from one energy level to a higher energy level. The energy change associated with the transition provides information on the structure of a molecule and determines many molecular properties such as colour. The relationship between the energy involved in the electronic transition and given the frequency of radiation is given by Planck's relation.



There are three types of electronic transition which can be considered involving p, s, and n electrons. Transitions involving charge-transfer electrons, Transitions involving d and f electrons (not covered in this unit)