**Q2. a.** Implement 8-input Boolean function,

Z = A'B'C'D + AG'H + AG + A'B'CE + A'BF' using minimum number of 3-LUTs. **[4]**

**b.** Generate the configuration bit- stream needed to program the two CLBs shown in fig for the functions F = AB+ B'C + AC + D and G = A' implemented on them. The LUTs are initialized with value '0'. **[4]**