

Indian Institute of Science Education and Research, Kolkata

Chemistry of Main Group Elements- CH3201

Mid-Semester Examination

Answer

Time- 1 hour 30 mins

Full marks- 20

1. Draw the structure of $B_6H_6^{2-}$. 2
2. a) From Closo $B_6H_6^{2-}$, show how you can get corresponding Nido and Arachno boranes. 3
b) Show for all three above cases how many framework electrons are there. 5
3. Solution of a compound A can dissolve excess of base and excess of oxide, what is A and how can it do so? 3
4. Write the structure of $BeCl_2$ in solid state. 1
5. Write four examples of Zintl anions. 4
6. Why is the behaviour of Tl^+ similar to Group-1 elements? 2