INDIAN SCHOOL DARSAIT

DEPARTMENT OF CHEMISTRY

Subject: Chemistry Topic : chemical bonding Date of Worksheet: 10.9.2018

Resource Person: Rohitha Date of Submission:_____

Name of the Student: _____ Class &Division: XI Roll Number: _____

1	What is octet rule?	1
2	Define the following a) bond length b) bond angle c) bond order	1 each
3	Which of the following molecules is superoctate(expanded octet)? CO_2, ClF_3, SO_2, IF_5	1
4	Why NH_3 possess a pyramidal shape? Explain.	2
5	Complete the table	2

type	No of electron pairs	geometry	Bond angle	examples
AB_5				
AB_3				

6	Differentiate between ionic bond and covalent bond.	2
7	Calculate the formal charge of all the atoms in the following a) SO_2 b) NH_4^+ c)H_2SO_4	2 each
8	What are the favorable condition for the formation of ionic bond?	2
9	Define lattice enthalpy. On what factors do they depend?	3
10	What are the important postulates of VSEPR theory?	3
11	Give the definition for bond dissociation enthalpy. Also explain the factors on which it depend.	3
12	Briefly explain the limitations of octet with proper examples.	3
13	Predict the shapes of the following using VSEPR model BCl_3, $SiCl_4$, H_2S, PH_3, SF_6,PCl_5	3
14	Draw the Lewis structures of the following a)HCOOH b)$SiCl_4$ c)H_2S	3