# INDIAN SCHOOL DARSAIT

## DEPARTMENT OF CHEMISTRY

Subject: Chemistry Topic : states of matter Date of Worksheet: 4.2.2019

Resource Person: Rohitha Date of Submission:_____

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

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| 1 | Why Helium is used in balloons in place of hydrogen? | 1 |
| 2 | At what temperature below which a gas does not obey ideal gas law? | 1 |
| 3 | At what temperature the volume of a gas is supposed to be zero? | 1 |
| 4 | Name the temperature above which a gas cannot be liquefied by any amount of pressure. | 1 |
| 5 | How is the partial pressure of a gas in a mixture related to the total pressure of the gaseous mixture? | 1 |
| 6 | Define: a)critical pressure b)Boyle temperature | 2 |
| 7 | What is the effect of increase of temperature on surface tension and viscosity in a liquid? | 2 |
| 8 | a)Why vegetables are cooked with difficulty at hill station.<br><br>b) Define absolute zero. | 2 |
| 9 | a) What type graph will you get when PV is plotted against P at constant temperature?<br><br>b) State Boyle's law. | 2 |
| 10 | Calculate temperature of 4.0 moles of gas occupying $5dm^3$ volume at 3.32 bar. ($R= 0.083$ bar $dm^3$ $k^{-1}$ $mol^{-1}$) | 2 |
| 11 | Calculate the total pressure in mixture of 4g of $O_2$ and 2gm of $H_2$ can fixed to a total volume of IL at $0^oC$. ($R = 0.0821$) Latm. $Mol^{-1}$ | 2 |
| 12 | What do you mean by ideal gas and real gas? Why do real gases deviate from ideal behaviors | 2 |
| 13 | Using the equation of state PV=nRT Show that at given T,density of gas proportional to gas pressure P. | 2 |
| 14 | State charle's law. Give the mathematical expression. Also draw the isobar for the law. | 2 |