**Lesson Plan (2018-19)**

**Dr Jai Pal**

**BSc I, Section A(NON MED)**

**Subject: Physical Chemistry**

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| --- | --- | --- | --- |
| **Week** | **Date** | **Day** | **Topic** |
|  | 13 july 2018 | Friday | Kinetic Molecular Theory of Gases. |
|  | 14 july 2018 | Saturday | Maxwell’s distribution of velocities and energies (derivation excluded) Calculation of root mean square velocity. |
| **1** | **15 july 2018** | **Sunday** | ####################### |
| 20 july 2018 | Friday | Average velocity and most probable velocity. |
| 21 july 2018 | Saturday | Collision diameter, collision number |
| **2** | **22 july 2018** | **Sunday** | #################### |
| 27 july 2018 | Friday | Deviation of Real gases from ideal behavior, |
| 28 july 2018 | Saturday | Derivation of Van der Waal’s Equation of State |
| **3** | **29 july 2018** | **Sunday** | ################## |
| 03 Aug-2018 | Friday | Its application in the calculation of Boyle’s temperature (compression factor) |
| 04 Aug-2018 | Saturday | Numericals |
| **4** | **05 Aug-2018** | **Sunday** | ############### |
| 10 Aug-2018 | Friday | **TEST** |
| 11 Aug-2018 | Saturday | **Assignment-1** |
| **5** | **12 Aug-2018** | **Sunday** | ###################### |
| 17 Aug-2018 | Friday | Critical temperature, critical pressure |
| 18 Aug-2018 | Saturday | Critical volume and their determination. |
| **6** | **19 Aug-2018** | **Sunday** | ################## |
| 24 Aug-2018 | Friday | Continuity of states |
| 25 Aug-2018 | Saturday | The isotherms of Van der Waal’s equation, relationship between critical constants |
| **7** | **26 Aug-2018** | **Sunday** | **Raksha Bandhan** |
| 31 Aug-2018 | Friday | Relationship between critical constants and Van der Waal’s constants. |
| 01 sept-2018 | Saturday | Critical compressibility factor. |
| **8** | **02 sept-2018** | **Sunday** | **################** |
| 07 sept-2018 | Friday | The Law of corresponding states. |
| 08 sept-2018 | Saturday | **Numerical** |
| **9** | **09 sept-2018** | **Sunday** | **##################** |
| 14 sept-2018 | Friday | Classification of solids |
| 15 sept-2018 | Saturday | Law of constancy of interfacial angles |
| **10** | **16 sept-2018** | **Sunday** | **#################** |
| 21 sept-2018 | Friday | Law of rational indices |
| 22 sept-2018 | Saturday | Miller indices |
| **11** | **23 sept-2018** | **Sunday** | **####################** |
| 28 sept-2018 | Friday | Elementary ideas of symmetry and symmetry elements |
| 29 sept-2018 | Saturday | Seven crystal systems and fourteen Bravais lattices |
| **12** | **30 sept-2018** | **Sunday** | **###################** |
| 05 Oct-2018 | Friday | X-Ray diffraction, Bragg’s law |
| 06 Oct-2018 | Saturday | A simple account of Laue method, rotating crystal method |
| **13** | **07 Oct-2018** | **Sunday** | ###################### |
| 12 Oct-2018 | Friday | Powder Method |
| 13 Oct-2018 | Saturday | **Assignment-2** |
| **14** | **14 Oct-2018** | **Sunday** | ################## |
| 19 Oct-2018 | Friday | Structure of liquids |
| 20 Oct-2018 | Saturday | Properties of liquids – surface tension, |
| **15** | **21 Oct-2018** | **Sunday** | ################### |
| 26 Oct-2018 | Friday | Vapor Pressures of liquids |
| 27 Oct-2018 | Saturday | Viscosity and VI |
| **16** | **28 Oct-2018** | **Sunday** | ############## |
| 02 Nov-2018 | Friday | **Optical Rotations** |
| 03 Nov-2018 | Saturday | Revision |
| **17** | **04 Nov-2018** | **Sunday** | ################### |
| 06-13 |  | Vacation-I(Diwali) |
|  | 14 | Wednesday | KUK Exam |