**Organic Chemistry**

**Basic Reading (For Part B)**

* **R. T. Morrison**, **R. N. Boyd**, ***Organic Chemistry***, 6th edition, Prentice-Hall, New Delhi, 1992. (For Basic understanding, very good for basic concepts)
* **P. Y. Bruice, K. J. R. Prasad,** ***Essential Organic Chemistry***, 1st edition, Pearson Education, New Delhi, 2008. (Again Fundamental Organic Book)
* Organic Reaction Mechanism by Peter Sykes (Must have for Basic Organic Mechanism)
* M. B. Smith, Organic Synthesis, McGraw Hill Higher Education, 2001

**Advance Reading (For Part C)**

* **J. Clayden, N. Greeves, S. Warren**, ***Organic Chemistry***, 2nd edition, Oxford Unviersity Press, New Delhi, 2012. (Must have for CSIR NET)
* **W. Carruthers and I. Coldham**, ***Modern Methods of Organic Synthesis***, 4th ed., Cambridge University Press, UK, 2004. (Advance Organic Synthesis)
* Modern Organic Synthesis by Michael Nantz and Zweifel
* **J. March**, ***Advanced Organic Chemistry***, 4th ed., John Wiley & Sons, Inc., Canada, 1992.
* **F. A. Carey and R. J. Sundberg**, ***Advanced Organic Chemistry***, Part A & B, 5th ed., Springer, New York, 2007. (For Advance Readers)
* ***Stereochemistry of Organic Compounds***, Wiley: New York, Eleil (BEST BOOK FOR NET)

**MOLECULAR SPECTROSCOPY**

* Spectroscopy by Donald Pavia (Excellent Book for Basic Spectroscopy)
* Symmetry and spectroscopy of Molecules by K Veera Reddy (Another Good book for Electronic Spectroscopy)
* Molecular Spectroscopy by Banwell (Basic Book for Physical spectroscopy)
* 1H NMR and C13 NMR spectroscopy by Metin and Balcii
* J. M. Hollas, Modern Spectroscopy (Fourth Edition), John Wiley & Sons, New York, 2004. (Only For Advance Readings)

**INORGANIC CHEMISTRY**

* Inorganic Chemistry by James E. Huheey, Ellen A. Keiter, Richard R. Keiter, Fourth Edition, Addison-Wesley, Reading, Massachusetts, 1993 **(International Edition Prefereable)**
* Coordination chemistry by ramlingam
* Inorganic Chemistry (5th Edition) by D. F. Shriver and P. W. Atkins; Oxford
* Chemistry of the Elements by N N Greenwood & A Earnshaw, Butterworth-Heinemann, Elsevier, Oxford, 2005 (Indian Reprint)
* Inorganic Chemistry By Gary L. Miessler & Donald A. Tarr and Donald A. Tarr, Pearson, Prentice Hall, New Jersey, 2010
* Concepts and Models of Inorganic Chemistry (3rd Edition) by B. E. Douglas, D. H. McDaniel, J. J. Alexander; John Wiley **(Must for Advance Inorganic Chemistry)**
* Inorganic Chemistry by Gary Wulfsberg , 2006,University Science Books (For Advance Readers)
* Biological inorganic chemistry : structure and reactivity / edited by Ivano Bertini
* Infrared and Raman spectra of inorganic and coordination compounds by Nakamoto
* Inorganic and organometallic polymers by Chandrasekhar, Vadapalli.

**ORGANOMETALLIC CHEMISTRY**

* Basic Organometallic Chemistry: Concepts, Syntheses and Application by BD Gupta & Anil J Elias Year,2013, Universities Press (For basic Readers)
* Organometallics: A Concise Introduction by Christoph Elschenbroich,2006, Wiley-VCH3rd Edition (Excellent Books for Advance Readings)
* Inorganic and Organometallic Reaction Mechanisms, Atwood
* Inorganic Spectroscopy by Drago

**PHYSICAL CHEMISTRY**

* Physical chemistry by Castellan
* Physical Chemistry by KL Kapoor (VOL I – V) (must have collection of these series)
* Physical chemistry by Mortimer (Very good book for thermodynamics & quantum chemistry)
* Physical chemistry by Atkins (Favorite book of CSIR NET Exam Setter)
* Physical chemistry by silbey and bawendi (For Basic Concepts)
* Physical chemistry by Samuel Glasstone.

**QUANTUM CHEMISTRY**

* P. W. Atkins and R. S. Friedman, Molecular Quantum Mechanics, Oxford University Press, Oxford, 2004. (Must for Quantum Chemistry basics)
* Quantum Chemistry by RK Prasad
* J. P. Lowe and K. Petersen, Quantum Chemistry, Elsevier Academic Press, MA, USA, 2006
* A. K. Chandra, Quantum Chemistry, Tata McGrawHill, New Delhi, 2004.
* Quantum Mechanics by R. Shankar **(For Physical aspects of Quantum Chemistry)**
* D. A. McQuarrie, Quantum Chemistry, Viva Books, New Delhi, 2003. **(Must have for CSIR NET)**
* Physical chemistry by Robert G. Mortimer, Harcourt/Academic Press, c2000
* Quantum Chemistry : through problems and solutions by RK Prasad.

**GROUP THEORY**

* Group theory by Alan Vincent
* F. A. Cotton, Chemical applications of Group theory, Third Edition, John Wiley & Sons, New York, 1990
* D. M. Bishop, Group Theory and Chemistry, Dover Publications, New York, 1977.

**CHEMICAL KINETICS**

* Chemical Kinetics and Reaction Dynamics by Paul L. Houston ***(For Advance Reaading)***
* Chemical kinetics and Reaction dynamics by Santosh Upadhyay ***(For Basic Understanding)***
* Chemical Kinetics by Ladler

**PHOTOCHEMISTRY AND PERICYCLIC REACTIONS:**

* Photochemistry and pericyclic Reactions by Jagdamba Singh