

UNITWISE SYLLABUS ,CONTENT & STANDARD REFERENCE

| Unit No. | Topics | Primary Reference | Secondary Reference |
|----------|---|-------------------|---|
| 1 | Basic Mathematical Concept | 11th , 12th NCERT | RD Sharma |
| 2 | Atomic Structure & Quantum | 11th NCERT | Peter Atkins, Engel & Reid |
| 3 | Basic Organic Chemistry / GOC | 11th , 12th NCERT | Paula Bruise , Carey Sandberg, Jerry March |
| 4 | Theory of Gases | 11th NCERT | KL Kapoor , Engel & Reid , Charles Mortimer |
| 5 | Stereochemistry | Class Notes | Subrastosen Gupta , PS Kalsi , Jonathan Clayden, Ernest Eliel |
| 6 | Chemical Bonding | 11th NCERT | Hueey Kietier , Shriver Atkins , Miessler tarr and E Housecraft |
| 7 | Colligative Properties | 12th NCERT | KL Kapoor , Puri Sharma Pathania R.C Mukherji , Martin Siberberg |
| 8 | Solid State | 12th NCERT | KL Kapoor, Hueey, Castellen , Charles Mortimer |
| 9 | Reaction Mechanism | 12th NCERT | Jonathan clayden, Paula Brucie , Carey Sandberg, George Zweifel |
| 10 | Chemical Thermodynamics | 11th NCERT | KL Kapoor , Peter Atkins, Ira Leviine , Castellen , Charles Mortimer |
| 11 | Aromatic Electrophilic and Nucleophilic substitution Addition elimination | 12th NCERT | Jonathan clayden, Peter Sykes, Carey Sandberg , George Zweifel , Jerry March |
| 12 | Periodic Properties of elements | 11th NCERT | Shriver Atkins, Cathrine e Housecraft , Miessler Tarr , Hueey Kieter |
| 13 | Reaction Intermediates | Class Notes | Peter Sykes, Jonathan Clayden, Jerry March, George Zweifel Ernest Eliel |
| 14 | Main group Elements | 11th , 12th NCERT | Hueey Kietier , Shriver Atkins , and E Housecraft, Greenwood, Cotton and Wilkinson , Ajai Kumar |
| 15 | Chemical Equilibrium | 11th NCERT | Peter Atkins, KL Kapoor , Ira Levine , Charles Mortimer , Castellen |
| 16 | Reagents | Class Notes | Jeery March , Paula Brucie , Carey Sandberg, Carruthers , Jonathan clayden , George Zweifel |
| 17 | D Blocks Elements | 12th NCERT | Ajai Kumar , Miessler Tarr Greenwood, Cotton & Wilkinson, Shriver Atkins |
| 18 | Ionic equilibrium | 11th NCERT | KL Kapoor, Puri Sharma Pathania Charles Mortimer, RC Mukherji |
| 19 | Radioactivity | Class Notes | Asim K Das Vol 1, Puri Sharma Pathania |
| 20 | Phase Equilibrium | Class Notes | Castellen, Charles Mortimer, Peter Atkins , KL Kapoor |

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| 21 | Name Reaction and Reaarangements | 12th NCERT | George Zweifel, Ernest Eliel Carey Sandberg, Paula Brucie, Clayden, IL Finar |
| 22 | Titration | Class Notes | KL Kapoor , Puri Sharma Pathania |
| 23 | Electrochemistry | 12th NCERT | KL Kapoor , Engel & Reid , Charles Mortimer, Ira Levine |
| 24 | Pericyclic Reaction | Class Notes | Clayden, Paula brucie, C. Sandberg, Jerry March, george Zweifel |
| 25 | Coordination Complexes | 12th NCERT | Hueey Kieter, Shriver Atkins Miessler tarr, Cathrine E housecraft, G Lawrence |
| 26 | Conductance | 12th NCERT | Castellen, Charles Mortimer, Peter Atkins , KL Kapoor, Puri Sharma Pathania |
| 27 | Aromatic and Heterocyclic chemistry | Class Notes | Clayden, SP Bhutani , John Joule and Keith Mills, Benna Negi R K Parashar |
| 28 | Instrumental Method Analysis | Class Notes | RS Khandpur , Skoog |
| 29 | Adsorption | 12th NCERT | KL Kapoor, Puri Sharma Pathania Castellen |
| 30 | Qualitative Organic Analysis | Class Notes, YR Sharma , JDS Yadav | Clayden, Pavia , Lampman , Kriz C banwell Silversteen |
| 31 | BioInorganic | Class notes | Hueey, Asim K Das, Stephen J. Lippard, JD Lee |
| 32 | Chemical Kinetics | Class 12th NCERT | KL Kapoor, Castellen CharlesMortimer Peter Atkins, Ira Levine, Laidler Engel & Reid |
| 33 | Natural Products Chemistry | Class Notes | Clayden, Paula Brucie, SP Bhutani, Saujata V bhat , Yang Ye , SP Bhutani |
| 34 | Analytical Chemistry | Class Notes | KL Kapoor, Puri Sharma Pathania Castellen , Laidler |
| 35 | Spectroscopy | Class Notes | Banwell KL Kapoor, Levine, Peter Atkins Charles Mortimer |
| 36 | Organometallic | Class Notes | Hueey, Atkins, greenwood, Housecraft, J Hartwig, Crabtree, Elias, Asim K Das |
| 37 | Photochemistry | Class Notes | KL Kapoor, Puri Sharma Pathania Castellen, Laidler |