

## Chemistry (313)

### Bifurcation

Total no. of Lessons =32

| MODULE<br>(No. & name)                                    | I<br>TMA (40%)                                                                                                 | II<br>Public Examination<br>(60%)                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                           | (No.oflessons-12)                                                                                              | Total Lesson - 20                                                                                                                                                                                                                                                                                                        |
| <b>Module I</b><br>Some Basic concepts of Chemistry       | -                                                                                                              | Lesson-1 (Atoms, Molecules and Chemical Arithmetic)<br>-                                                                                                                                                                                                                                                                 |
| <b>Module II</b><br>Atomic Structure and Chemical Bonding | Lesson-3(Periodic Table and Periodicity in Properties)                                                         | Lesson-2 (Atomic Structure)<br>Lesson-4(Chemical Bonding)                                                                                                                                                                                                                                                                |
| <b>Module III</b><br>States of Matter                     | Lesson-5 (The Gaseous State and Liquid State)<br>Lesson-6 (The Solid State)<br>Lesson-8 (Colloidal)            | Lesson-7(Solutions)                                                                                                                                                                                                                                                                                                      |
| <b>Module VI</b><br>Chemical Energetics                   | Lesson-10 (Spontaneity of Chemical Reactions)                                                                  | Lesson-9(Chemical Thermodynamics)                                                                                                                                                                                                                                                                                        |
| <b>Module V</b><br>Chemical Dynamics                      | Lesson-11 (Chemical Equilibrium)<br>Lesson-14 (Chemical Kinetics)<br>Lesson-15 (Adsorption and Catalysis)      | -<br>Lesson-12(Ionic Equilibrium)<br>Lesson-13(Electrochemistry)<br>Lesson-18 (General Characteristics of <i>p</i> -Block Elements)                                                                                                                                                                                      |
| <b>Module VI</b><br>Chemistry of Elements                 | Lesson 16 (Occurrence and Extraction of Metals)<br>Lesson-19 ( <i>p</i> -Block Elements and Their Compounds-I) | Lesson-17 (Hydrogen and <i>s</i> -Block Elements)<br>Lesson-20 ( <i>p</i> -Block Elements and their Compounds-II)<br>Lesson-21 <i>d</i> -Block and <i>f</i> -Block Elements<br>Lesson-22 ( Coordination Compounds)                                                                                                       |
| <b>Module VII</b><br>Chemistry of Organic Compounds       | -                                                                                                              | Lesson-23 (Nomenclature and General Principles)<br>Lesson-24 (Hydrocarbons)<br>Lesson-25 (Compounds of Carbon Containing Halogens)<br>Lesson-26 (Alcohols, Phenols and Ethers)<br>Lesson-27 (Aldehydes, Ketones and Carboxylic Acids)<br>Lesson-28 (Compounds of Carbon Containing Nitrogen)<br>Lesson-29 (Biomolecules) |
| <b>Module VIII</b><br>Chemistry in Everyday Life          | Lesson-30(Drugs and Medicines)<br>Lesson-32 (Environmental Chemistry)                                          | Lesson-31 (Soaps, Detergents and Polymers)                                                                                                                                                                                                                                                                               |