

**S V R K GOVERNMENT DEGREE COLLEGE :: NIDADAVOLE**  
**TABLE - A - CURRICULAR PLAN - LECTURER WISE**

**NAME OF THE LECTURER : Smt. M.USHA RANI**  
**DEPARTMENT : CHEMISTRY**

**CLASS: II B.SC**

**YEAR: 2021-2022**


**SEMESTER: 4 PAPER : 4**

| SERIAL NUMBER | MONTH & WEEK | HOURS AVAILABLE | SYLLABUS TOPIC  | ADDITIONAL INPUT /VALUE ADDITION               | CURRICULAR ACTIVITY           |                |                   |                          |          | CO-CURRICULAR ACTIVITY |                   |                          |    |  | REMARKS |
|---------------|--------------|-----------------|---|--|-------------------------------|----------------|-------------------|--------------------------|----------|------------------------|-------------------|--------------------------|----|--|---------|
|               |              |                 |   |  | ACTIVITY                      | HOURS ALLOTTED | WHETHER CONDUCTED | IF NOT, ALTERNATIVE DATE | ACTIVITY | HOURS ALLOTTED         | WHETHER CONDUCTED | IF NOT, ALTERNATIVE DATE |    |  |         |
| 1             | 2            | 3               | 4   | 5  | 6                             | 7              | 8                 | 9                        | 10       | 11                     | 12                | 13                       | 14 |  |         |
| May           | 1 st week    | 3 Hrs           | <u>OMC</u> : Definition and classification of OMC, concept of hapticity of organic ligands, Metal carbonyls-18 e- rule, electron count of mononuclear, poly nuclear and substituted metal carbonyls of 3d series. | OMC properties and synthetic applications      | Lecture/ICT Practical LECTURE | 3Hrs           |                   |                          |          |                        |                   |                          |    |  |         |
|               | 2 nd week    | 4 Hrs           | General methods synergic effects of preparation for OMC , p-acceptor behavior of CO, -MO diagrammes.  |  | ICT                           | 4Hrs           |                   |                          |          |                        |                   |                          |    |  |         |
|               | 3 rd week    | 4 Hrs           | <u>Carbohydrates</u> : occurrence, classification, constitution of glucose , fructose.  |  | ICT                           | 4Hrs           |                   |                          |          |                        |                   |                          |    |  |         |
|               | 4 th week    | 4 Hrs           | Interconversions, disaccharides.  | Terminology in carbohydrates                   | ICT                           | 4Hrs           |                   |                          | ASSIN.   | 2HRS                   | YES               |                          |    |  |         |
| June          | 1 st week    | 4 Hrs           | <u>Amino acids</u> : Definition, classification, preparation methods, physical properties.  |  | ICT                           | 4Hrs           |                   |                          |          |                        |                   |                          |    |  |         |
|               | 2 nd week    | 4Hrs            | Chemical properties of Amino acids, structure and nomenclature of peptides, structure of protein.   | Importance of Amino acids in biological system | ICT                           | 4Hrs           |                   |                          |          |                        |                   |                          |    |  |         |

|           |       |  |  |                               |       |  |  |      |       |  |  |  |  |  |
|-----------|-------|--|--|-------------------------------|-------|--|--|------|-------|--|--|--|--|--|
| 3 rd week | 4Hrs  | <u>Nitrogen compounds</u> : Nomenclature, classification, tautomerism and preparation methods for nitro alkanes and reactivity of nitro alkanes. |  | LECTURE                       | 2Hrs  |  |  |      |       |  |  |  |  |  |
| 4 th week | 4 Hrs | Amines classification, preparation methods, physical and chemical properties, distinction between primary, secondary and tertiary amines.        |  | Lecture/ICT Practical LECTURE | 4Hrs  |  |  |      |       |  |  |  |  |  |
| 2Hrs      | 4 Hrs | Diazonium salts preparation and synthetic applications   |  | lecture                       | 4Hrs  |  |  |      |       |  |  |  |  |  |
| 2 nd week | 4Hrs  | <u>Photo chemistry</u> : laws of Photo chemistry, Quantum yield ,Jablonski diagram   | Applications of fluorescence & phosphorescence processes | Lecture/ICT Practical         | 3HRS  |  |  | QUIZ | 1 Hrs |  |  |  |  |  |
| 3 rd week | 4Hrs  | <u>Thermodynamics</u> : Laws of Thermodynamics, Heat capacities and their relationship ,Joule-thomson effect                                     | Different statements for first law of thermodynamics.    | Lecture                       | 2Hrs  |  |  |      |       |  |  |  |  |  |
| 4 th week | 4Hrs  | Kirchoff's equation, canot's theorem, entropy changes, Third law of Thermodynamics, Helmholtz and Gibbs energies.                                |  | Lecture/ICT Practical LECTURE | 4 HRS |  |  |      |       |  |  |  |  |  |

  
 SIGNATURE OF THE LECTURER

  
 SIGNATURE OF THE HEAD OF THE DEPARTMENT

  
 SIGNATURE OF THE PRINCIPAL