| Course No. | Course Title | Teaching Schedule | | | Allotment of Marks | | | Duration of Exam (Hrs.) |
|---|---|---|---|---|---|---|---|---|
| | | L | T | P | Theory | Sessional | Total | |
| AS-103N | Applied Chemistry | 3 | 1 | 0 | 75 | 25 | 100 | 3 |
| ***Purpose*** | *To introduce engineering based applications of applied chemistry to students.* | | | | | | | |
| **Course Outcomes (CO)** | | | | | | | | |
| **CO-1** | Basic concepts along with some advanced applications of thermodynamics and phase rule chemistry. | | | | | | | |
| **CO-2** | Methods of determining hardness in water and various raw water purification techniques. | | | | | | | |
| **CO-3** | Green chemistry approach including different principles towards sustainable development | | | | | | | |
| **CO-4** | Importance of lubricants in advanced engineering. | | | | | | | |
| **CO-5** | Different types of corrosion, their mechanisms along with preventive measures. | | | | | | | |
| **CO-6** | Introduction and advanced uses of different engineering materials. | | | | | | | |
| **CO-7** | Importance of different nanomaterials in day to day life with their future prospects. | | | | | | | |

| Course No. | Course Title | Teaching Schedule | | | Allotment of Marks | | | Duration of Exam (Hrs.) |
|---|---|---|---|---|---|---|---|---|
| | | L | T | P | Practical | Sessional | Total | |
| AS-109N | Applied Chemistry Lab | 0 | 0 | 2 | 30 | 20 | 50 | 3 |
| ***Purpose*** | *To train the students for handling of chemicals and glassware* | | | | | | | |
| **Course Outcomes (CO)** | | | | | | | | |
| **CO-1** | Testing of certain parameters of water samples obtained from different sources | | | | | | | |
| **CO-2** | Determination of some of the physical and chemical properties of lubricants | | | | | | | |
| **CO-3** | To determine some important properties of liquids like surface tension, coefficient of viscosity | | | | | | | |
| **CO-4** | To make familiar with the use of flame photometer, Abbes Refractrometer | | | | | | | |
| **CO-5** | To make familiar with the use of conductometer and pH meter | | | | | | | |