

 VITS, BHOPAL		VAISHNAVI INSTITUTE OF TECHNOLOGY & SCIENCE DEPT NAME: BASIC SCIENCE <u>LIST OF ASSIGNMENT</u>	FORM NO	VITS/A/17
BRANCH	CSE/EE/ME/CE		REV. NO	01
SEMESTER	I/II		REV. DT	18/07/2018
NAME OF FACULTY: RAMA PAWAR SUBJECT: ENGINEERING CHEMISTRY SUBJECT BT-101				

ASSIGNMENT-1

1. Determination of hardness by EDTA method,
2. Explain Boiler troubles (Sludge & Scale, Priming & Foaming, Boiler Corrosion, Caustic Embrittlement),
3. Explain Softening of water by Lime-Soda.
4. Zeolite and Ion Exchange methods.

ASSIGNMENT-2

1. Explain Mechanism of lubrication,
2. Classification of lubricants,
3. Flash & Fire Points, Cloud & Pour Points, Carbon Residue.
4. Saponification Number, SEN.

ASSIGNMENT-3

1. Explain of Polymers, their classification,
2. Define of thermoplastics & thermosetting with examples,
3. Explain of Applications of PVC, PVA, Teflon, Nylon6, & Nylon6:6,
4. Short notes on Phenol-Formaldehyde, Urea- Formaldehyde.
5. Explain of Natural & Synthetic Rubber.

ASSIGNMENT-4

1. Give Phase diagram of single component system (Water).
2. Give Phase diagram of binary Eutectic System.
3. Types of corrosion Mechanisms & prevention.

ASSIGNMENT-5

1. Principle, Instrumentation & Applications of Spectroscopic.
2. Principle, Instrumentation & electronics spectroscopy.
3. Vibrational & Rotational Spectroscopy of diatomic molecules.

ASSIGNMENT-6

1. Explain Effective Nuclear Charge
2. Variations: S, P, d & f Orbital energies of atoms in periodic table,
3. Explain Electronics Configuration, atomic & Ionic sizes.

