### Government College, Jind

## **Chemistry Department**

#### 1 Vision:

To create an academically sound environment that nurtures, motivates and inspires excellence in teaching and learning in chemical sciences along with concern for society.

#### 2 Mission

To impart theoretical and practical knowledge in areas of chemical sciences and contribute knowledge which encourages creativity, insight development and a passion for science.

## **3 Programme Outcome**

After completion of degree, students gain the theoretical as well as practical knowledge of handling chemicals. Also they expand the knowledge available opportunities related to chemistry in the government services through union public service commission (UPSC)particularly in the field of foo inspector, pharmacist etc.

Afford a broad foundation in chemistry that stresses scientific reasoning and analytical problem solving with a molecular perspective. Achieve the skills required to succeed in graduate school, 5professional School and the chemical industry like cement industries, agro product, Paint industries, Rubber industries, Petrochemical industries, Food processing industries, Fertilizer industries etc.

#### **4** Programme Duration and Intake:

B.Sc (Non Medical)- 3 Years duration-Intake-240

B.Sc (Medical)- 3 Years durations-Intake-120i

**5 Course Outcome** 

**INORGANIC CHEMISTRY** 

Ilnorganic Chemistry explanation of atomic structureatomic structure Categorize matter Illustrate theExplain electronic structure of atom.Categorize the atomic structureRelate the quantum numbers and atomic orbitals.evaluate the periodic properties of elements.

Relate periodic properties of elements.

Express the periodically properties of elements Categorize elements estimate molecular structure Relate the molecular structure and Lewis dot notation Calculate formal charge Demonstrate the resonance forms of molecules.

Explain the molecular geometry with VSEPR theory.

# **Organic chemistry**

Explain the nomenclature of Organic Compounds.

To make student understand different organic compounds with respect to the functional groupand become eligible to call the name of the organic compounds scientifically.

Basic Concepts In Organic Chemistry.Students become eligible to study the subject initially by understanding the basic things forchemical reactions i.e. Substrate and Reagents Types of reagents Electrophilic and NucleophilicHomolytic and heterolytic fission.

Electron mobility Inductive effect etcAlkanes and CycloalkanesMany of the daily used materials are organic compounds and majority of them are hydrocarbonstherefore this topic makes the concept regarding their formationAlkenes, Dienes and AlkynesBasic of the alkenes and alkynes etc with respect to the chemical point of view.

# **Physical Chemistry**

To understand electrochemistry to do basic electrical works.

State and apply the laws of thermodynamics; perform calculations with ideal and real gases; design practical engines by using thermodynamic cycles;

Predict chemical equilibrium and spontaneity of reactions by using thermodynamic principles.

To apply the concepts of colloids and gels

To learn depth knowledge about liquid states.

To understand concept of solid state and gaseous state

Study Chemical Kinetics to understand rate factors affecting etc.

# **Teacher Profile**

1 Name Nisha Pruthi Designation Assistant Professor. Qualification M.Sc.(Chemistry),,NET. E-mail ID- pruthi.nisha09@gmail.com Mobile.No: 9896660450

2 Name Reetu
Designation Assistant Professor.
Qualification M.Sc.(Chemistry),,NET(JRF).
E-mail ID - r.jaglan023@gmail.com
Mobile No: 7206302392
3. Name Pushpa
Designation Assistant Professor.
Qualification M.Sc.(Chemistry),,NET.
E-mail ID - dhandapushpa@gmail.com
Mobile No: 9138294381

Name: Suman Rani

Designation: Extension lecturer

Qualification: Msc., NET

E-mail sumankhatkar111@gmail.com.

noMobile No: 7495085137

Name: Savita Rani

Designation: Extension lecturer

Qualification: M.Sc.(Chemistry), NET.

E-mail: savitagoyat89@gmail.com

Mobile No: 8059269974

Name : Ms. Monika

Designation: Extension lecturer

Qualification: Msc. ,NET

E- mail: monikabisla93@gmail.com

Mobile No:9306528554

Name: Ms. Poonam

Designation: Extension lecturer

Qualification: Msc., NET JRF

E-mail: poonamsaharan441995@gmail.com.

Mobile No: 9813473201

Name: Sushma Rani

**Designation: Extension lecturer** 

Qualification: M.Sc., NET

E- mail: sushmadhillon451@gmail.com.

Mobile No: 8901034849

Name: Renu Devi

**Designation: Extension lecturer** 

Qualification: M.Sc., NET

E- mail: renu88160@gmail.com

Mobile No: 8816024166

Name: Mr. Ankit Designation: Extension lecturer Qualification: M.Sc., NET E-mail: ankitlecturer@gmail.com. Mobile No: 8901432520

Name : Monika Jaglan Designation: Extension lecturer Qualification: M.sc NET E-mail: monikajaglan1988@gmail.com. Mobile No: 9991878952

Name: Seema Redhu Designation: Extension lecturer Qualification: M.sc ,NET. E-mail: redhuseema84@gmail.com Mobile No: 9541255554