## O.P.JINDAL SCHOOL, SAVITRI NAGAR ANNUAL SYLLABUS (2023-24)

## CLASS-XI

## SUBJECT-CHEMISTRY

| S<br>N | MONTH     | I.D. | NO.OF<br>PERIODS | CHAPTER  | ENRICHMENT ACTIVITY  | VALUES IMPARTED/LEARNING OUTCOMES  | EXTRA CONTENT   |  |
|--------|-----------|------|------------------|--|--|--|---|--|
| 1      | JUNE      | 11   | 14               | 1.Some Basic<br>Concept of<br>Chemistry                                | Discussion<br>and demonstration method,<br>Question-answer method<br>Activity – To verify the law of<br>conservation of mass                                 | Students will learn about<br>the basic concept of<br>chemistry, Different term of<br>concentration of solution and basic<br>terms used in the measurement. | Relationship between :<br>empirical formula and<br>molecular formula .<br>Molarity and molality |  |
| 2      | JULY      | 23   | 18               | 2.Structure of<br>Atom   | Discussion<br>and demonstration method,<br>Question-answer method<br>Activity- To analyse the acid<br>and basic radical in the given salt.<br>(NH4Cl,NH4Br)  | Students will learn about<br>different theory and<br>atomic models of atom,<br>and their significance to<br>understand the microstructure of<br>atom.      | V.B. T.   |  |
|        |           |      | 12               | 3.Classification<br>of elements and<br>Periodicity in<br>Properties    | Discussion and demonstration method,<br>Question- answer method  | Student will understand the features<br>of Modern Periodic Table and the<br>periodic properties of different<br>elements.                                  | 10 MCQ based on<br>IIT/NEET   |  |
| 3      | AUGUST    | 23   | 15               | 4.Chemical<br>Bonding and<br>Molecular<br>Structure                    | Discussion and demonstration method,<br>Question-answer method<br>Activity- To analyze the acid and basic<br>radical in the given salt: Zinc sulphate.       | Students will learn about the different<br>theory of chemical bonding and<br>molecular structure of different<br>compounds with their properties.          | 10 MCQ based on<br>IIT/NEET   |  |
|        |           |      | 15               | 8.Redox<br>Reactions   | Discussion and demonstration method,<br>Question-answer method   | Students will learn about the conceptof<br>redox reaction and their types. They will<br>also generalize the properties of hydrogen.                        | 10 MCQ based on<br>IIT/NEET   |  |
| 4      | SEPTEMBER | 12   |                  | HALF YEARLY EXAMINATION  |  |  |   |  |
| 5      | OCTOBER   | 20   | 20               | 7.Equlibrium   | Discussion and demonstration method,<br>Question-answer method<br>Activity-To analyses the acid and basic<br>radical in the given salt:<br>MgSO <sub>4</sub> | They will enhance the knowledge of<br>equilibrium state and factors, concept of<br>acid and base, electrolytes and their<br>behavior.                      | 10 MCQ based on<br>IIT/NEET   |  |
| 6      | NOVEMBER  | 13   | 15               | 12.Organic<br>Chemistry:<br>Some Basic<br>Principles and<br>Techniques | Activity-To analyze the acid and basic<br>radical in the given salt.<br>Pb(NO <sub>3</sub> ) <sub>2</sub>  | Students will learn about the<br>classification, IUPAC name of carbon<br>compounds and also the qualitative and<br>quantitative analysis of elements.      | 10 MCQ based on<br>IIT/NEET   |  |

| 7 | DECEMBER | 19 | 20 | 13.Hydrocarbon                   | Activity-To analyze the acid and basic<br>radical in the given salt.<br>Al <sub>2</sub> (SO4) <sub>3</sub>  | Students will learn about the Structures,<br>Physical and chemical properties with<br>reactions of alkanes, alkenes, alkynes and<br>aromatic compounds. chemical reaction<br>of preparation, isomerism. | 10 MCQ based on<br>IIT/NEET |
|---|----------|----|----|----------------------------------|---|---|-----------------------------|
| 8 | JANUARY  | 22 | 20 | 6.Chemical<br>Thermodynamic<br>s | Discussion and demonstration method,<br>Question-answer method<br>Activity-<br>Find the molarity and strength of HCl<br>solution by M/20 solution of NaHCO <sub>3</sub> | Student will learn about the different<br>laws of thermodynamics, and the criteria<br>of spontaneity by the entropy and free<br>energy.   |                             |
| 9 | FEBRUARY | 15 |    | ANNUAL EXAM                      | INATION   |   |                             |
| 1 | MARCH    |    |    | ANNUAL EXAMINATION               |   |   |                             |
| 0 |          |    |    |                                  |   |   |                             |

## SYLLABUS FOR EXAMINATION

| SN | EXAMINATION                | MONTH     | MAX.<br>MARKS | MAX.<br>TIME | SYLLABUS FOR<br>EXAMINATION |
|----|----------------------------|-----------|---------------|--------------|-----------------------------|
| 1  | TEST-1                     | JULY      | 20            | 1 Hr         | Chapter-1 and 2             |
| 2  | Half Yearly<br>Examination | SEPTEMBER | 70            | 3 Hrs        | Chapter-1,2,3and 4          |
| 3  | TEST-2                     | NOVEMBER  | 20            | 1 Hr         | Chapter-7and 8              |
| 4  | Annual<br>Examination      | FEBRUARY  | 70            | 3 Hrs        | Chapter-1,2,3,4,6,7,8,12,13 |