

KASIDIH HIGH SCHOOL
Aunit of JEM Foundation
Syllabus plan for year 2010-11

Subject:- Informatics Practices

Std:- XI

S.No	Name of Chapter	Topic	No.of periods required chapter wise
1.	UNIT – 1 Computer system and Business Application	<u>FIRST TERM</u> i. Evolution of computers. ii. Input, Output and Memory iii. Computer software. iv. Operating system. v. Programming Language vi. Windows O/S vii. Accessories of Windows viii. Word processing basic. ix. Editing word doc. x. Using grammar and spell check. xi. Mail merge xii. Industries and Business computing	8
2.	Unit – 3 (RDBMS)	i. Database concept and ADO controls ii. Introduction to Oracle. iii. Starting with SQL. iv. SQL select statement. v. SQL function. vi. Multiple Table & Sub-Queries. vii. Creating views	2 3 5 5 4 5 3
3.	Unit – 2 (JAVA)	<u>SECOND TERM</u> i. Getting started with programming using IDE. ii. Programming fundamentals. iii. Variables. iv. Control Structure. v. Programming guidelines. vi. UNIT – 1 vii. UNIT – 3	8 5 4 8 8 2 2
4.	Unit – 4	<u>THIRD TERM</u> i. e-Governance ii. e-Business iii. e-Learning iv. UNIT – 1 v. UNIT – 2 vi. UNIT – 3	4 3 3 2 6 4

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Subject:- Informatics Practices

Std:- XII

S.No	Name of chapter	Topic	No.of periods required chapter wise
1.	UNIT -1 Business Computing	<u>FIRST TERM</u> i. Open source software. ii. Business computing. iii. Program development Methodology. iv. Relational database concept. v. Computer Networking. vi. Open source concepts.	1 2 1 1 2 2
2.	UNIT – 2 JAVA	i. Access specifier for classes. ii. Members and methods iii. Concept of package. iv. Inheritance v. Methods overloading vi. Abstraction and interfaces.	4 5 3 5 2 3
3.	UNIT – 3 RDBMS	i. Review of class XI ii. Database Fundamentals.	2 1
4.	UNIT – 4 IT Application	i. Review of class XI ii. Front-end interface iii. Back-end database iv. Front-end and database Connectivity.	2 2 2 2
5.	Unit – 1 Business Computing	<u>SECOND TERM</u> i. Review of first term.	3
6.	UNIT – 2 JAVA	i. Commonly used libraries function. ii. Math objects iii. Simple GUI objects Using (ODBC) iv. Web application Development. v. HTML based web pages.	8 4 6 3 3
7.	Unit – 3	i. Review of first term.	3
8.	Unit – 4	i. Review of first term	3
9.	Solving of (CBSE) Sample Papers	<u>THIRD TERM</u> i. Practical Paper ii. Model test paper	4 4

	iii.	Sample papers	4
	iv.	Full review	10

KASIDIH HIGH SCHOOL
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Subject:- Chemistry

Std:- XI

S.No	Name of Chapter	Topic	No. of periods required chapter wise
1.	Some basic concepts of chemistry	i. Introduction, laws of chemical combination. Dalton's atomic Theory. ii. Elements and compound, writing formula. iii. AMU, mole concept. iv. % composition, Empirical and molecular formula. v. Stoichiometry including titration.	4 1 2 2 6
2.	Structure of Atom	i. Discovery of electron, proton and neutron in brief, isotopes, isobar's and isotonic Rutherford's model. ii. Bohr model and atomic spectrum. iii. Dual nature of matter- Planck's Quantum. iv. De Broglie's concept, uncertainty principle. v. Quantum number, Aufbau principle, Pauli's principle, Hund's rule. vi. Electron configuration stability of half filled and completely filled orbitals.	2 3 2 2 4 2
3.	Classification of elements and periodicity	i. Historical development upto modern P.T, Electronic layout of long form of P.T. ii. Periodic trends in properties of elements – atomic radius, ionic radius, inert gas radius, Ionisation enthalpy, electron gain enthalpy, electronegativity, valency.	3 5
4.	Chemical bondings	i. electronic theory of bonding, bond	

	and molecular structure.	<p>peorametres, lawis structure, polar and non-polar bonds, dipote moment, resonance.</p> <p>ii. VSEPR model</p> <p>iii. VBT-hybridation</p> <p>iv. MOT-theory of homonuclear diatomic molecules.</p> <p>v. Intermolecular forces-hydrogen bond.</p>	<p>6</p> <p>2</p> <p>3</p> <p>3</p> <p>2</p>
5.	States of matter	<p>i. Introduction, gas laws-Boyle's laws, charle's laws, gay-cussaus law, Avogatro's laws, equation of states, palton's law of partial pressures compressibility factor.</p> <p>ii. Ideal and real gass. Deviation from ideal behavior and its cause, vander waal's equation.</p> <p>iii. Liquefaction of gasses, critical temp.</p> <p>iv. Liquid state-vapour press, viscosity, surface tention.</p>	<p>8</p> <p>3</p> <p>1</p> <p>2</p>
6.	Thermodynamics	<p>i. Concept of systems, surroundings, extensive of intensive properties, state functions work, heat, energy.</p> <p>ii. First law – internal energy, eathalpy, heat capacity, measurement of Δu and ΔH.</p> <p>iii. Thermo Chemistry $\Delta_r H$, $\Delta_f H$, $\Delta_{comb} H$, $\Delta_{heat} H$, bond enthalpy, heat of sublimation and atomization, phase transition, dilution.</p> <p>iv. Entropy-spontaneous and non-spontaneous processes, Gibb's function and equilibrium.</p>	<p>3</p> <p>3</p> <p>5</p> <p>4</p>
7.	Equilibrium	<p>i. Equilibrium in physical and chemical processes.</p> <p>ii. Law of mass action.</p> <p>iii. Equilibrium constant, K_p & K_s.</p> <p>iv. Factors influencing equilibrium be chaters principle.</p> <p>v. Ionic equilibrium. Degree of conisation.</p> <p>vi. Acids and bases- different concepts.</p> <p>vii. Concept of salts, buffer solution, solving product, common can effect.</p>	<p>1</p> <p>1</p> <p>3</p> <p>1</p> <p>1</p> <p>2</p> <p>4</p>
8.	Redox reductions	<p>i. oxidation saltes, modern concepts of</p>	<p>3</p>

		ii. oxidation and reduction, redox reaction, balancing redox reactions. Application.	2
9.	Hydrogen	i. Position in P.T, isotopes-preparation, properties and uses, hydrogen-economy hydrides. ii. Water-structure, properties, hardness of water and its removal. iii. Deuterium oxide, hydrogen peroxide.	4 2 2
10.	S-block elements	i. General introduction. ii. Group-1 discussion w.r.t physical and chemical properties including compound oxides and hydroxides, halides, oxosalts anomalous nature and diagonal relationship of Li. iii. group-2, discussion w.r.t physical and chemical properties including compound (oxides and hydroxides, halides, oxosalts) anomalous nature and diagonal relationship of Be. iv. Compounds- preparation, properties and uses of Na_2CO_3 , NaCl, NaOH, NaHCO_3 , CaO, CaCO_3 . v. Biological importance of Na, K, Mg, Ca.	1 4 4 2 1
11.	p-block elements	i. Introduction, inert pair effect. ii. gr-13: periodicity w.r.t physical and chemical properties including compounds. iii. Boron-properties, borax, boric acid, boranes. iv. Aluminum-reactions and uses. v. Gr-14 : periodicity w.r.t physical and chemical properties including compounds. vi. Carbon – catenation, allotropes, properties. Oxides(CO , CO_2). vii. Silicon- SiCl_4 , silica, silicones, silicates, zeolites.	1 2 3 1 2 3 3
12.	Basic principles and techniques in organic chemistry	i. O.Sc, nature of bonding, classification, functional group, homogeneous series. ii. IUPAC	3 3

		iii. Isomerism iv. Electron displacement effects LI effect, E-effect, M-effect and hyperconjugation. v. Hemolytic and heterolytic fission, free radicals, C ⁺ -ion, C [—] -ion and carbenes. vi. Type of organic reactions. vii. Qualitative and quantitative analysis of o.c.s.	2 4 2 2 4
13.	Hydrocarbons	i. alkanes-naming, conformations, methods of preparation and properties-mechanism of SF-reactions. ii. Alkenes – naming, isomerism, preparation and properties – mechanism of addition reactions(Markownikoff's rule and peroxide effect). iii. Alkynes-naming, isomerism, preparation and properties. Aromatic hydrocarbons-St.of benzene, aromaticity. Prep2 and propsmechanism of SE-reaction directive influence of group.	5 4 4
14.	Environmental chemistry	i. pollution- air, water and soil pollution, ozone depletion, acid rain, smog, green house effect, green chemistry control of pollution.	6