

Syllabus for Class X (2011-2012)
ENGLISH

April	Literature Reader : Two Gentlemen of Verona , The Frog and the Nightingale MCB: Health and Medicine WB: Determiners, Tenses Writing:	[Awaited.....]
May	Literature Reader : Mrs. Packletide's Tiger MCB: Health and Medicine(contd.....) WB: Sub – Verb Agreement Writing:	[Awaited.....]
July	Literature Reader : The letter , Mirror MCB: Education WB: Non-finites , Relatives , Integrated grammar Practice I , II Writing :	[Awaited.....]
August	Literature Reader : The Dear Departed MCB: Science WB: Connectors, Integrated Grammar Practice III Writing:	[Awaited.....]
September	Literature Reader : Not Marble , nor the Glided Monuments WB: Conditionals	
October	Literature Reader : A Shady plot , Ozymandias MCB: Environment WB: Comparison , Avoiding Repetition , Integrated Grammar Practice IV Writing:	[Awaited.....]
November	Literature Reader : Patrol Babu , Film Star , The Rime of the ancient mariner MCB: Travel and Tourism WB: Normalisation , Modals, Integrated Grammar Practice V Writing:	[Awaited.....]
December	Literature Reader : Virtually True , Snake MCB: National Integration WB: Active Voice , Reported Speech , Integrated Grammar Practice VI and VII Writing:	[Awaited.....]
January	Literature Reader : Julius Caesar MCB: National Integration(Contd.....) WB: Reported Speech(Contd.....) , Preposition Writing:	[Awaited.....]
February	Complete Syllabus , Revision	

FA1
 UT – 20
 RolePlay – 10
 HW – 10
 CW – 10

FA2
 MCQ – 20
 Assignment – 10
 More About Poet – 10
 Reading Project – 10

FA3
 UT – 20
 CW – 10
 HW – 10
 More About Poet – 10

FA4
 MCQ – 20
 RolePlay – 10
 Assignment – 10
 Brochure - 10
 Project

MATHS

I Term

April	Linear equation in two variables 1. Solution of a linear equation by graphical method 2. By algebraic Method Equations reducible to a pair of linear equations in two variables Real Numbers 1. Euclid's division lemma 2. Fundamental theorem of arithmetic .
May	Polynomials Zeroes of a polynomial , Geometrical meaning and relationship between zeroes and coefficients of a polynomial , division algorithm for polynomials
July	Triangles Introduction to similar figures , Similar triangles and Polygons . Similarity of triangles , Criteria for similarity of triangles . Areas of similar triangles . Pythagoras theorem . Introduction to Trigonometry Meaning of trigonometric ratios of the angle . Trigonometric ratios of same specific angles . Trigonometric ratios of 0° , 30° , 45° , 60° & 90° & Complementary angles . Trigonometric identities .
Aug / Sep	Statistics - Mean , median and mode
	FA 1 UT – 20 Marks CW-10 Marks Assignment – 10 Marks Project Work – 10 Marks Total – $50 \times 2 = 100$ Marks
	FA 2 UT2-MCQ (Theory)- 20 Marks Hands on Activity – 30 Marks Total – $50 \times 2 = 100$ Marks
	SA1 – 90 Marks

II Term

October	Some applications of Trigonometry . Line of sight , angle of elevation & depression
November	Quadratic Equations Standard form of a quadratic equation solution of a quadratic equation Solution of a quadratic equation by factorization and completing the square , Nature of roots . Arithmetic Progressions (AP) Introduction to AP . General form of an AP . nth term of an AP . Sum of first n terms of an AP .

- December** Circles
Tangent , secant to a circle , number of tangents from a point on a circle
length of tangents drawn from external point to a circle .
- Constructions
Division of a line segment in a given ration . To construct a triangle similar
a given triangle as per given scale factor .
- Co-ordinate Geometry – Distance and Section formulae, Area of a
triangle.
- Probability –
- January** Areas related to circles
Perimeter and area of a circle , Area of Sector , segment and combination
of plane figures .
- Jan / Feb** Surface areas and volumes : Surface area and volume of combination of
solids , Frustum of Cone .
- | | |
|--------------------------|--------------------------------|
| FA 3 | FA 4 |
| UT3 – 30 Marks | UT4- 20 Marks |
| Assignment – 10 Marks | Hands on Activities – 30 Marks |
| CW – 10 Marks | Total – 50x 2 = 100 Marks |
| Total – 50x2 = 100 Marks | |
- SA2** – 90 Marks

PHYSICS

- April / May** Electricity
Electric current and circuit, electric potential and potential difference,
circuit diagram, ohm's law, factors on which the resistance of a conductor
depends ,.
Resistance of a system of resistors, resistors in series, resistors in
parallel, heating effect of electric current, practical applications of heating
effect of electric – current, electric power.
- July/Aug** Magnetic effects of electric current
Magnetic field and field lines, magnetic field due to a current through a
straight conductor, right – hand thumb rule, magnetic field due to a current
through a circular loop, magnetic field due to a current in a solenoid.
- Force on a current carrying conductor in a magnetic field, electromagnetic
induction, domestic electric circuits.
- September/
October** Sources of energy
What is a good source of energy, conventional sources of energy,
improvements in the technology for using conventional sources of
energy, alternative or non – conventional sources of energy, energy from
the sea,
Geothermal energy, nuclear energy, environmental – consequences, how

long will an energy source last us ?

November/ December	Light Reflection of light, Spherical mirrors, representation of images formed by spherical mirrors using ray diagrams, sign convention for reflection by spherical mirrors, mirror – formula and magnification, refraction of light, the refractive index, refraction by spherical lenses image formation by lenses , image formation in lenses using ray diagrams , sign convention for spherical lenses , lens formula and magnification , power of a lens.
January	The human eye and the colourful world :- the human eye , power of accommodation , defects of vision and their correction , refraction of light through a prism , dispersion of white light by a glass prism , atmospheric refraction , scattering of light .
February	Revision

CHEMISTRY

TERM 1

April	Chemical Reactions and Equations Types of chemical reactions, combination, decomposition, displacement, double displacement, precipitation, neutralization, oxidation, reduction in terms of gain and loss of oxygen and hydrogen.
May/ July	Acids, Bases and Salts Chemical properties, examples and uses , concept of pH scale, preparation and Uses of NaOH, CaOCl ₂ , NaHCO ₃ , Na ₂ CO ₃ , POP
August	Metals and Non - metals Brief discussion of basic metallurgical processes, properties of common metals And non metals, elementary idea about bonding, corrosion and prevention.
September	Sources of energy Biomass.

TERM 2

Oct / Nov	Periodic classification of elements Gradations in properties, Mendeleev's periodic table.
Dec/ Jan	Carbon and its compounds Covalent bond formation. Carbon compounds, elementary idea about bonding, Nomenclature of carbon compounds, difference saturated and Unsaturated hydrocarbons,
February	Chemical properties of carbon compounds ,Ethanol and Ethanoic acid

BIOLOGY

I Term

- April** Chapter 6 : Life Processes
1. Nutrition : How do living things get their food, Autotrophic nutrition, Heterotrophic nutrition, How do organisms obtain their nutrition, Nutrition in human beings.
- May** 2. Respiration : Aerobic and Anaerobic respiration, Respiration in human beings.
- July** 3. Transportation : Transportation in human beings, our pump – the heart, the tubes – blood vessels, maintenance by platelets, lymph, transportation in plants, transport of water, transport of food and other substances.
4. Excretion : Excretion in human beings, Excretion in plants.
- August** Chapter 7 : Control and Coordination
I In Animals
Animals' nervous system, what happens in reflex action, Human brain, How tissues are protected, How does nervous tissue cause action., Hormones in animals.
- September** Chapter 7 : Control and Coordination
II In Plants
Coordination in plants, Immediate response to stimulus, Movement due to growth.

II Term

- October** Chapter 8 : How do organisms reproduce?
Modes of reproduction used by single organisms, Fission, Fragmentation, Regeneration, Budding, Vegetative propagation, spore formation, sexual reproduction, sexual reproduction in flowering plants, sexual reproduction in human beings, male reproductive system, female reproductive system, reproductive health.
- November** Chapter 9 : Heredity and Evolution
Accumulation of variations during reproduction, Heredity, How do these traits get expressed, Sex determination, Evolution, Acquired and inherited traits, speciation, evolution and classification, fossils, Evolution by stages, Human evolution.
- December** Chapter 15 : Our Environment
What happens when we add waste to the environment, Ecosystem – its components, food chains, food webs, ozone layer and how it is getting depleted, Managing the garbage.
Chapter 16 : Management of Natural Resources
Why do we need to manage resources, Forest and wild life, sustainable management, Water harvesting, An overview of natural resources and management.
- January** Management of Natural resources

February Revision

FA1

Debate = 10 Marks
UT1 = 20 Marks
Science Quiz = 20 Marks
Total = 10 + 20 + 20 = 50 Marks
50 x 2 = 100 Marks

FA2

Hands on Experiment = 20 Marks
CW+HW – 10 Marks
UT2 = 20 Marks (Short , Long , MCQ)
Total = 20 + 10 +20 = 50 Marks
50 x 2 = 100 Marks

SA1 80 Marks

FA3

UT3 – 20 Marks
Project – 10 Marks
Performing an activity – 10 Marks
Survey – 10 Marks
Total – 20 + 10 + 10 + 10 = 50
= 50 x 2 = 100 Marks

FA4

Hands on Experiment – 20 Marks
CW + HW – 10 Marks
UT4 – 20 Marks
Total – 20 + 10 + 20 = 50
= 50 x 2 = 100 Marks

SA2 80 Marks

Month	Social Science(2011-12)	
	Subject	Lesson
April / May	History	Industrialisation 1850-1950
	Pol.Science	Power sharing in a Democracy Federalism
	Geography	Natural Resources Forest Wild Life Resources
	Economics	Story of Development
July	History	Print Culture and Nationalism
	Pol.Science	Democracy and Diversity
	Geography	Water Resources
	Economics	The Role of Service Sector in India
August / September	History	Nationalism in Indo-China
	Pol.Science	Gender , Religion and caste
	Geography	Agriculture
	Economics	Money and Financial System

October/ November	History	Nationalism in India
	Pol.Science	Popular struggles and Movements
	Geography	Mineral and Energy Resources
	Economics	Globalisation
December	History	Nationalism in India – Map Work
	Pol.Science	Political Parties
	Geography	Outcomes of Democracy
	Economics	Manufacturing Industries Consumer awareness
January/ February	History	Revision
	Pol.Science	Challenges to Democracy
	Geography	Lifeline of National Economy
	Economics	Revision

FA1

CW(10) + HW(10) + PROJECT(20) + Map(Geo - 5) + OT(His – 5) = 50 Marks
 Total = 50 x 2 = 100 Marks

FA2

UT(20) + MCQ(20) + Eco-Activity(5) + OT(Pol.Sc – 5) = 50 Marks
 Total = 50 x 2 = 100 Marks

SA1 90 Marks(Hist - 23, Geo-23, Pol Sc.-22 , Eco – 22 each)

FA3

CW(10) + HW(10) + PROJECT(20) + Map(Geo - 5) + OT(His – 5) = 50 Marks
 Total = 50 x 2 = 100 Marks

FA4

UT(20) + MCQ(20) + Eco-Activity(5) + OT(Pol.Sc – 5) = 50 Marks
 Total = 50 x 2 = 100 Marks

SA1 90 Marks(Hist - 23, Geo-23, Pol Sc.-22 , Eco – 22 each)