# Content

**Biology** 

**Maths** 

**Physics** 

Chem

**English** 

Computer

# Maths- 11<sup>th</sup> (Sci)

S.N.	Month	Topic	Sub Concept	Activity		
		(Sem-1 Textbook)				
1	June	Ch -1 Sets	-	-		
		Ch - 2 Relations & Functions				
2	July	Ch - 3 Trigonometric Functions				
		Ch - 5 Complex Numbers and				
		Quadratic Equations				
		Ch - 6 Linear Inequalities				
3	Aug	Ch - 7 Permutations and				
		Combinations				
		Ch - 8 Binomial Theorem				
4	Sep	Ch - 9 Sequences and series				
		Ch - 4 Principle of Mathematical	ciple of Mathematical			
		Induction				
5	Oct	Ch - 4 PMI				
		REvision				
6	Nov	Ch - 10 Straight lines				
		Ch - 11 Conic Sections				
7	Dec	Ch - 11 Conic sections (Continue)				
		Ch - 12 Introduction to 3-D				
		Geometry				
8	Jan	Ch - 13 Limits & Derivatives				
		Ch - 14 Mathematical Reasoning				
9	Feb	Ch - 15 Statistics				
		Ch - 16 Probability				
10	March	Revision for exam				

#### Chemistry-11

S.N.	Month	Topic	Sub Concept	Activity
1	June	- Ch-1 : Some basic concepts of	-Importance of chemistry	-Video & Lab
		chemistry	- Nature of matter	
			- Properties of matter & their measure-	
			ment.	
			- Uncertainity in measurement- Laws of	
			chemical combination- Datton's Atomic	
			theory- Atomic & molecular masses	
			- Percentage composition	
			- Stoichiometry & Stoichiometric	
			calculations	
2	July	Ch-2 Structure of Atom	- Subatomic particles	-Video & Lab
			- Atomic models - Bohr's model of	
			Atom- Quantum mechanical model of	
			Atom	
		Ch-3 Classification of Elements &	- Why do we need to classify Element?	
		periodicity in properties	- Genesis of periodic classification	-Video & Lab
			- Modern periodic classification & Table	
			- Nomenclature of Elements with Atomic	
			no >100	
			- configuration of Elements &	
			periodic table- Electron configurations &	
			Types of S,P,d,f block-Trends in	
			properties	
3	Aug	Ch-4 Chemical bonding & molecu-	- Kossel- Lewis Approach	-Video & Lab
		lar structure	- Ionicbond- Bond parameters	
			- VSEPR theory- valence bond Theory-	
			hybridisation- Molecular orbital theory-	
			Hydrogen bonding	
4	Sep	Ch-5 States of matter	- Intermolecular Forces	
			- Thermal Energy - Intermolecular forces	
			vs thermal interactions- The gaseous	
			state- The Gas laws- Ideal gas Equa-	
			tion- Kinetic molecular theory of gases-	
			Behaviour of real gases & devitation-	
			Liquifaction of Gases- Liquid state.	
		Ch-8 Redox Reaction	- Classical Idea- Redox in terms of $\frac{1}{e}$	-Video & Lab
			transfer Reactions - Oxidation no-	
			Redox & electrode process	

## Chemistry-11

S.N.	Month	Торіс	Sub Concept	Activity
5	Oct	Ch-7 Equilibrium	- Equilibrium in physical process -	- Video & lab
			Equilibrium in chemical processes	
			- Law of chemical Equilibrium & Equilib-	
			rium constant	
;	Nov	Ch-6 Thermodynamics	- Thermodynamic state	
			-Applications- measurement of $\Delta U < \Delta H$ : Calori metry- Enthulpy change, $\Delta rH$ of a Reaction- Enthalpy for different types of Reaction	
			- Spontaneity- Gibbs Energy & Equilib-	
			rium	
			- Homogeneous Equilibria	
			- Heterogeneous Equilibria	- Video & lab
			- Applications - Relations	
			- Factors - Ionic Equilibrium	
			- Acid, base & salts- Ionization	
			- Buffer solutions	
,	Dan		- Sohibility Equilibria	
•	Dec	Ch-9 Hydrogen	- Position of Hydrogen	- Video & lab
			- Dihydrogen- Preparation	
		Ob 40 O blook Flores sets	- Properties- Hydries- water	
		Ch-10 S-block Elements	- Hydrogen peroxide - Heavy water-	
			Dihalogen as a Fuel -	
			- General characteristics	
			- Anomalous properties	
			- Some important compounds	- Video & lab
			- Biological importance in Group 1 &	
	lon	Ob 40 Omercia ab ancieta a como	Groups	
}	Jan	Ch-12 Organic chemistry - some	- General Introduction	
		basic principal & Techniques	- Tetravalence of carbon	
			- Structural Reprentations	
			- Classification- Nomenclature - Isomer-	
			ism - Fundamental concepts in organic	- Video & lab
			Reaction mechanism- methods of	
			purification - Qualitative Analysis-	
		Ch 12 Hydroserhon	Quantitative Analysis	- Video & lab
		Ch-13 Hydrocarbon	- Classification - Alkanes - Alkenes-	
			Alkynes- Aromatic Hydrocarbons	
			- Carcinogenicity & Toxicity	
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#### **Chemistry-11**

S.N.	Month	Topic	Sub Concept	Activity
	Feb	Ch-11 P-block Elements	- Group 13 Elements: The Boron family -	- Video & lab
			Important Trends & Anomalous proper-	
			ties of Boron - some important	
			compunds of Boron	- Video & lab
			- Uses - Grpup of 14 elements	
			- Important trends & Anomalous	
			behaviour of carbon	
			- Allotropes of carbon	- Video & lab
			- Some important compounds of carbon	
			& silicon	
		Ch-14 Environmental chemistry	- Environmental pollution	
			- Water pollution- Soil pollution - Indus-	
			trial waste- Stralegies to control Environ-	
			mental pollution- Green Chemistry	
0	March	-	- Revision & Doubt solving	
11	April	-	- Revision & Doubt solving	

#### English-11

S.N.	Month	Topic	Sub Concept	Activity
1	June	- Ch-1 The Portrait of Lady	-Reading comprehension (unseen)	-Meaning of the text
			Character sketch (grand mother)	expressions
		Poem- The photograph	- Meaning of poem, Central idea of	
			poem, Poetic devices used in poem	
		- Data Analysis	- Refer the diagram and statement	- Provide its information
2	July	- Ch-2 Were not afraid to die	- List the steps taken by the captain to	- Paragraph writing on
			protect the ship from rough weather.	Historical facts about
				water disaster
		- Ch-3 Discovering Tut	Reading Egypt traditions, rituals and	- Write a note on
			funerary practices	'Mummy's
		- Sup-1 The summer of the	- Character sketch of mourad and Aram	- Speech writing on "The
		Beautiful		life and culture of tribal
				people
		Tenses	- Explaining concept of tenses and	
		Direct and indirect speech	practise exercise for transforming direct	
			into indirect and vice versa.	
		Email	- Explaining components of email	- Format
			writing	
3	Aug	Poem-The Laburnum Top	- Central idea of poem, rhyming words	- Diary writing about a
			and scheme of poem	day you have enjoyed
		Ch-4 Landscape of the Soul	- Reading comprehension, Replacing	beauty of nature
			words with synonyms	
		Sup -2 The Address	- Reading comprehension, writing in	- Information on world
			detail on central character of prose	war I
		Essay	- Explaining types of essay and practis-	
			ing with topics	
		Note making from speech	- Explaining concepts of note making	- Preparing advertise-
		Advertisement	and advertisement	ment on different topic /
				subject
4	Sep	Poem - The Voice of the Rain	- Meaning of poem, Recitation of Poem	- Write poem on 'Rain'
		Ch-5 The Ailling planet	- Reading comprehension	- Discussion of the
		Sup-3 Ranga's marriage	- Boy returns to village from Bangalore,	problem 'overpopulation
		Active and passive Voice	villagers flood to see him	
			- Explaining concept of subject and	
			object and how the way we place them	- Preparing a report on
		- Precise writing	in sentence changes voice of sentence.	Teacher's day celebra-
		- Report writing	- Shorten the paragraph	tion in school
			- Write content	
5	Oct	Sup-4 Albert Einstein	- Reading meaning,life story	- Biography of Albert
		Transformation of Sentences	- Explaining rules of transformation of	Einstein
			sentences	
		Letter writing	- Explaining components of letter writing	- format

## English-11

S.N.	Month	Topic	Sub Concept	Activity
		Article writing	- Explaining concept of it	- Select a newspaper
				article and do it's sub-
				titling
6	Nov	- Poem Childhood	- Explaining central idea of poem	- Write a short poem on
		Figure of Speech	- Practise exercise	any phase of your life
		Unseen Poetry and prose	- Find answers	
		Comprehension		
7	Dec	Ch-6 The Browning Version	- Conversation between a lower fifth-	- A class debate to
			grade student, Taplow and Mr Frank	increase confident and
				understanding
		Ch-7 The Adventure	- Reading comprehension, Writing in	- Write an adventurous
			detail on central character of prose	incident
		Sup-5 Mother's Day	- Role play	
		Transformation of sentences	- Explaining different types of sentences	
		Essay writing	and their transformation	
		Application writing	- Resume / Biodata	- Format
			- Explaining components of job	
			application	
8	Jan	Sup-6 The Ghat of the only world	- Inner meaning of life	- Write a soulful life stor
		Rectification of error	- Explaining concept with practise	
		Poem Father To Son	exercise of rectification of error	- Diary writing
		Punctuate the paragraph	- Follow rules	
		Poem paraphrasing	- Jot down the inner meaning/theme	
9	Feb	Ch-8 Silk Road	- Reading Comprehension	- Using internet prepare
		Sup-7 Birth		project on the life of
		Idioms and Phrases	- Explaining idioms and phrases	Hellen Keller <b>or</b> Sudha
		Email writing	- Follow format	chandran
		Precise writing	- Delivery of dialouge	
		Speech writing		
0	March	Sup-8 The Tale of the Melon City	- Rading Comprehension	- Write hillarious story

	GSEB STD-11 BIOLOGY						
Sr.No	Month	Topic	Sub Topic	Activity			
1	June	Ch-8 Cell: The Unit of life	- What is a cell? -Cell theory -An overview of cell -Prokaryotic cell & Eukaryotic cell	Practical in Biology Lab & Videos			
		Ch-9 Cell cycle & Cell Division	-cell Cycle -M Phase -Significance of Mitosis -Meiosis -Significance of Meiosis -How to analyze chemical composition? -primary & Secondary Metabolites	Videos			
		Ch. 10 Biomolecules	-Biomacromolecules -protein -Poly saccharine -Nucleic Acid -Structure of Protein -Nature of bond in a polymer -Concept of MetabolismMetabolic Basis for Living -The Living State -Enzyme				
2	July	Ch 10 (cont.) Ch.1 The Living World  Ch.2 Biological Classification	-What is "Living? -Diversity in the Living World -Taxonomic categories -Taxonomical Aids -Kingdom Monera -Kingdom Protista	Practical in Biology Lab & Videos			
		Classification	-kingdom Frotista -kingdom Frotista -kingdom Frotista -Kingdom Plantae Kingdom Animalia -Viruses, Viroids and Lichens -Algae				
3	Aug	Ch 2 (Cont.) Ch.3 Plant Kingdom	-Bryophytes -Pteridophytes -Gymnosperms -Angiosperms -Plant Life Cycles & Alternation of Generation	Practical in Biology Lab & Videos			
		Ch.4 animal Classification	Basis of Classification -Classification of Animals				
		Ch.5 Morphology of Flowering Plant	- The root -The leaf -The Inflorescence -The Flower -The Fruit -The seed -Description of a Typical Flowering Plant -Description Of some important Families				

4	Sep	Ch.6 Anatomy of Flowering Plant  Ch 7 Structural Organization in Animals	-The Tissues -The Tissue System -Anatomy of Dicot & Monocot plant  Animal Tissues -Organ & Organ System -Earthworm -Cockroach	Practical in Biology Lab & Video
5	Oct	Ch 11 Transport in plants  Ch 12 Mineral Nutrition	-Means of Transport -plant- water relations -Long Distance transport of water -Transpiration -Uptake & Transport of Mineral Nutrients - Phloem Transport : Flow from source to sink -Methods to study the Mineral Requirements of Plants  -Essential Mineral Elements -Mechanism of Absorption of Elements	Practical in Biology Lab & Video
			-Translocation of solutes -soil as Reservoir of Essential Elements -Metabolism of Nitrogen	
6	Nov	Ch.13Photosynthesis in higher plants	-What do we know? -Early Experiments -Where does photosynthesis take place? -How many pigment are involved in photosynthesis? -What is Light Reaction? -The Electron Transport -Where are the ATP & NADPH used? -The C4 Pathway -Photorespiration -Factor affecting Photosynthesis	Practical in Biology Lab & Video
		Ch 14 Respiration in Plants	-Do Plants Breathe? -Glycolysis -Fermentation -aerobic Respiration -The Respiratory Balance sheet -Amphibolic Pathway -Respiratory Quotient	
7	Dec	Ch 15 plant Growth & Development	-Growth - Differentiation & Redifferentiation -Development -Plant Growth Regulators -Photoperiodism -Vernalisation	Practical in Biology Lab & Video
		Ch 17 Breathing &	-Digestive System -Digestion of food -Absorption of Digested Products -Disorders of Digestive system	Practical in
		Ch 17 Breathing &	-Disorders of Digestive system -Respiratory Organs	Practical

		Exchange of gases	-Mechanism of Breathing	Biology Lab
		Exchange of gases	-Exchange of Gases	Diology Lab
			-Transport of Gases	&
			-Regulation of respiration	∝ Video
			-Disorders of Respiratory System	Viueo
8	Jan	Ch.18 Body Fluids &	-Blood	Practical in
O	Jan	Circulation	-Blood -Lymph (Tissue Fluid)	Biology Lab
		Circulation	-Lymph (11ssue ridiu) -Circulatory Pathways	biology Lab
			-Unculatory Faulways	&
				& Video
			-Regulation Of Cardiac Activity	video
		Ch 10 Essentant	-Disorders of Circulatory System	
		Ch 19 Excretory	-Human Excretory System	
		Products & their	-Urine Formation	
		Elimination	-Function of the Tubules	
			-Mechanism of Concentration of the Filtrate	
			-Micturition	
			-Role of other organ in Excretion	
			-Disorders of the Excretory System	
9	Feb	Ch 20 Locomotion &	-Types of Movement	Practical in
		Movement	-Muscle	Biology Lab
			-Skeletal System	
			-Joints	&
			-Disorders of Muscular & Skeletal System	Video
		Ch 21 Neural	-Neural system	
		Control &	-Human Neural System	
		coordination	-Neuron as structural & functional Unit of Neural	
			System	
			-Central Neural system	
			-Reflex Action & Reflex Arc	
			-Sensory Reception & Processing	
		Ch 22 Chemical	-Endocrine Glands & Hormones	
		Coordination &	-Human Endocrine System	
		Integration	-Hormones of Heart, Kidney & Gastrointestinal	
		_	Tract	
			-Mechanism of Hormone Action	
10	Mar	Revision	-	-

STD: 11<sup>TH</sup> SUB: PHYSICS

Month	Chapters & Topics
June	Part – 1
	Ch.1: Physical world
	Topics: 1.1 to 1.5
	Ch.2: Units And Measurements
	Topics: 2.1 to 2.10
	Ch.3: Motion in a Straight line
	Topics: 3.1 to 3.4
July	Ch.3: Motion in Straight line
	Topics: 3.4 to 3.7
	Ch.4: Motion in Plane
	Topics: 4.1 & 4.4
August	Ch.4: Motion in Plane
	Topics: 4.5 & 4.11
	Ch.5: Law of Motion
	Topics: 5.1 to 5.11
	Ch.6: Work, Energy And Power
	Topics: 6.1 to 6.12
September	Ch.7: System of Particles and Rotational Motion
	Topics: 7.1 to 7.14
	Ch.8: Gravitation
	Topics: 8.1 to 8.12
October	SA-1 Exam
November	Ch.9: Mechanical Properties of Solids
	Topics: 9.1 to 9.7
	Ch.10: Mechanical properties of Fluids
	Topics: 10.1 to 10.7
	Ch.11: Thermal Properties of Matter
	Topics: 11.1 to 11.10
December	Ch.12: Thermodynamic
	Topics: 12.1 to 12.13
	Ch.13: Kinetic Theory
	Topics: 13.1 to 13.7
January	Ch.14: Oscillations
	Topics: 14.1 to 14.10
	Ch.15: Waves
	Topics: 15.1 to 15.8

COMPUTER-11					
SR.NO	MONTH	TOPIC	CONCEPT	ACTIVITY	
1	Jun	Ch-1 Introduction to Multimedia	Multimedia, Elements, Usage, Stages in multimedia Production	Prepare an animation in Synfig	
		Ch-2 Animation Tool: Synfig	Toolbox, Canvas, Panels, Creating new file, Tools, BLine Tool, Zoom Tool, Smooth Move tool		
2	Jul	Ch-3 Creating Animation Using Synfig	Time bar, editing mode, key frame, Time loop	Use the frames and layers in your animation.	
		Ch-4 Introduction to Layers	Layers, Rotation on specified path		
3	Aug	Ch-5 Using Pictures in Synfig	Inserting Image, Masking, Creating slideshow using Synfig, Interactivity		
		Ch-6 Basic Ubuntu Linux commands	Starting Up the terminal, Listing the shells, Command Syntax, General Commands, echo, passwd, clear, working with directories, Working with files, I/O redirection,	Work with basic commands of Ubuntu Linux	
4	Sep	Ch-7 Vim Editor and Basic Scripting	Vim Modes, Creating file in Vim, Editing the document, Searching and replacing text, Executing Linux command through Vim, Shell script	Work with Vim editor and prepare scripts.	
		Ch-8 Advanced scripting	Finding process ID, Decision making task, The test command, Handling repetition, Functions	Perform advanced commands in Vim editor	
5	Oct	Ch-9 Introduction to Database Management System	Database Management System, Creating a sample Database for an Application, Data types, Numeric Types, Using Design View, Primary key, Save table	Create a data base table.	
6	Nov	Ch-10 Working with Tables	Insert data in the table, Editing, Delete records, sorting data, controlling data redundancy, Referential Integrity, Field properties		
7	Dec	Ch-11 Retrieving Data Using Queries	Defining query, Using Wizard, Using Design View, Editing query, Using multiple fields, Performing calculations, Grouping the data, Parameter query, SQL	Perform queries on your data base table.	
8	Jan	Ch- 12 Forms and Reports	Creating form using wizard, modifying form, moving control, change the date field, change background, search a record using form, Reports	Create form and report for your table.	
9	Feb	Ch-13 Current trends and Technologies	Mobile computing, Wi-Fi, GPRS, 3G and 4G, Bluetooth, Smart phones and Tablets, Cloud computing, RFID, Biometrics, GPS, computer control devices, Digital photography, Green computing	Discuss about latest trends in current technologies.	

Paper Style - 11