UNIQUE GROUP OF INSTITUTIONS

Subject: Islamiat | Computer | Urdu | Chemistry | Math | Physics | Biology | English

Complete Included and Excluded Syllabus (ALP) Class 1st Year

EXAMINATION 2025-26

RESEARCH & DEVELOPMENT DEPARTMENT

(R&D)

جو شامل نصاب نہیں(Excluded Syllabus)	شامل نصاب(Included Syllabus)	کل نصاب(100%)(Total Syllabus)
احادیثِ مبارکہ نمبر 3،5،8اور12	باب اوّل: قرآن مجید و حدیثِ نبوی ﷺ (الف) علوم القرآن (ب) علوم الحدیث (احادیث مبارکہ: 1، 2، 4، 6، 7، 9، 10، 11، 13، 14، 15)	باب اوّل: قرآن مجید و حدیثِ نبوی ﷺ (الف) علوم القرآن (ب) علوم الحدیث (احادیث مبارکہ:1 تا15)
Nil	باب دوم: ایمانیات و عبادات (1)ایمانیات: (الف) توحید کے دلائل اور تقاضے (ب) رسالت محمدی ﷺ کی خصوصیات (ج) ملائکہ پر ایمان (د) کُتب سماویہ پر ایمان (ہ) آخرت پر ایمان (2)عبادات: (الف) فلسفۂ نماز (ب) فلسفۂ زکوۃ و صدقات (ج) فلسفۂ صوم (د) فلسفۂ حج و قربانی	باب دوم: ایمانیات و عبادات (1)ایمانیات: (الف) توحید کے دلائل اور تقاضے (ب) رسالت محمدی ﷺ کی خصوصیات (ج) ملائکہ پر ایمان (د) کُتب سماویہ پر ایمان (ہ) آخرت پر ایمان (2)عبادات: (الف) فلسفۂ نماز (ب) فلسفۂ زکوۃ و صدقات (ج) فلسفۂ صوم (د) فلسفۂ حج و قربانی
Nil	باب سوم: سیرتِ نبوی ﷺ (الف) نبی کریم ﷺ بطور مثالی سربراہ خاندان (ب) نبی کریم ﷺ بطور مثالی سربراہ ریاست (ج) نبی کریم ﷺ بطور مثالی سپہ سالار (د) نبی کریم ﷺ کی معاشی تعلیمات	باب سوم: سیرتِ نبوی ﷺ (الف) نبی کریم ﷺ بطور مثالی سربراہ خاندان (ب) نبی کریم ﷺ بطور مثالی سربراہ ریاست (ج) نبی کریم ﷺ بطور مثالی سپہ سالار (د) نبی کریم ﷺ کی معاشی تعلیمات

باب چہارم:اخلاق و آداب	باب چہارم:اخلاق و آداب	باب چہارم:اخلاق و آداب
	(الف)اجتماعی خیر خواہی اور احترام انسانیت	(الف)اجتماعی خیر خواہی اور احترام انسانیت
(ج)معاشرتی تعلقات کے اخلاق و آداب	(ب)اخلاقی رذائل سے اجتناب	(ب)اخلاقی رذائل سے اجتناب
		(ج)معاشرتی تعلقات کے اخلاق و آداب
	باب پنجم:حسن معاملات و معاشرت	باب پنجم:حسن معاملات و معاشرت
	(الف)حقوق العباد (اساتذہ کرام،معاون عملہ،زوجین،اولاد،بیوہ)	(الف)حقوق العباد (اساتذہ کرام،معاون عملہ،زوجین،اولاد،بیوہ)
(ب)وراثت کی اسلامی تعلیمات	(ج)نکاح و طلاق کی اسلامی تعلیمات	(ب)وراثت کی اسلامی تعلیمات
		(ج)نکاح و طلاق کی اسلامی تعلیمات
باب ششم:ہدایت کے سرچشمے اور مشاہیر اسلام	باب ششم:ہدایت کے سرچشمے اور مشاہیر اسلام	باب ششم:ہدایت کے سرچشمے اور مشاہیر اسلام
	(الف)خلافت راشدہ	(الف)خلافت راشدہ
(ج)صوفیہ کرام رحمتہ اللہ علیہم (پیر سید مہر علی شاہ رحمتہ اللہ علیہ میاں شیر محمد شرقپوری رحمتہ اللہ علیہ)	(ب)ائمہ اہل بیت اطہار رضی اللہ تعالیٰ عنہم	(ب)ائمہ اہل بیت اطہار رضی اللہ تعالیٰ عنہم
		(ج)صوفیہ کرام رحمتہ اللہ علیہم (پیر سید مہر علی شاہ رحمتہ اللہ علیہ میاں شیر محمد شرقپوری رحمتہ اللہ علیہ)
باب ہفتم:اسلامی تعلیمات اور عصر حاضر کے تقاضے	باب ہفتم:اسلامی تعلیمات اور عصر حاضر کے تقاضے	باب ہفتم:اسلامی تعلیمات اور عصر حاضر کے تقاضے
	(الف)قانون کی پاسداری	(الف)قانون کی پاسداری
(ب)نظام اسلام کی نشاۃ ثانیہ اور مسلمانوں کی ذمہ داریاں	(ج)اسلاموفوبیا اور ہماری ذمہ داریاں	(ب)نظام اسلام کی نشاۃ ثانیہ اور مسلمانوں کی ذمہ داریاں
		(ج)اسلاموفوبیا اور ہماری ذمہ داریاں

Class: 11ᵗʰ   Subject: Computer

Overall Percentage of the Smart Syllabus (ALP)				
Class: 11ᵗʰ	Included %age = 80%		Excluded %age = 20%	
Chapter	**Included Syllabus**	**Excluded Syllabus**	**Included Syllabus % (Based on Exercise)**	**Excluded Syllabus % (Based on Exercise)**
1. Introduction to Software Development	1.1 Software development 1.2 Introduction to Software Development Life Cycle (SDLC) 1.3 Software Development Methodologies 1.4 Project Planning and Management, (pg # 1-9), 1.6 Introduction to design patterns 1.7 Software Debugging and Testing 1.8 Software Development Tools, (pg # 13-17) **Exercise:** MCQ (1-6), SQ (1-4,7), LQ (2,5)	1.5 Graphical Representation of Software Systems (Page no 09-13) **Exercise:** MCQs (Q no 7 Page no 18), Short Question (5,6 Page no 19), Long Question (1,3,4, Page no 19)	68%	32%
2. Python Programming	2.1 Introduction to Python Programming 2.2 Basic Python Syntax and Structure 2.3 Operators and Expressions 2.4 Control Structures 2.5 Python Modules and Built in Data Structures 2.6 Built in data Structures 2.7 Modular Programming in Python, (pg. # 20-35) **Exercise:** MCQs (1-5,7-9), SQ (1-4,6,7), LQ (1-6 (without 1 (a,c)))	2.8 Object-oriented programming in Python (Page no 35-36) 2.9 Advanced Python concepts (Page no 36-37) 2.10 Testing and Debugging in Python (Page no 38) **Exercise:** MCQs (Q no 6 Page no 39), Short Question (5,8 Page no 40), Long Questions No. 1 (a,c) (Page no 40)	83%	17%
3. Algorithms and Problem Solving	3.1 Understanding computational problems 3.2 Algorithms for problem solving 3.3 Problem solvability and complexity (pg.# 41-45, Before 3.3.3) 3.4 Algorithm analysis 3.5 Algorithm Design Techniques 3.6 Commonly used Algorithms (pg. # 47-53).	3.3.3 Complexity Classes (P, NP, NP-Hard, NP-Complete Page no 45-46) **Exercise:** MCQS (Q no 2-4 Page no 54), Long Question (1, Page no 55)	83%	17%

	Exercise: MCQs (1,5-10), SQ (1-8), LQ (2-5).				
4. **Computational Structures**	**No Change**		**No Change**	100%	0%
5. **Data Analytics**	5.1 Basic Statistical Concepts 5.2 Data Collection and Preparation (pg # 67-74) 5.4 Introduction to data visualization (without 5.4.1.5 Boxplots) (pg# 79-81) 5.5 Tools for data visualization pg# (82-83). **Exercise:** MCQs (2,3,6), SQ (3,4), LQ (3-5).		5.3 Building Statistical models (Page no 74-79) 5.4.1.5 Box Plots (Page no 82) **Exercise:** MCQs (Q no 1,4,5,7,8 Page no 84-85), Short Question (1,2 Page no 85), Long Question (1,2 Page no 85)	47%	53%
6. **Emerging Technologies**	6.1 Definition and Overview of Emerging Technologies 6.2 Cloud Computing 6.3 Applications and Implications of Cloud Computing. (Pg # 86-92) 6.6 Future Trends and Innovations, (pg # 97,98). **Exercise:** MCQs (1,2,4,6,7,9), SQ (3-9), LQ (1-3,5).		6.4 Introduction to Blockchain Technology (Page no 92-95) 6.5 Applications and Implications of Blockchain. (Page no 95-97) **Exercise:** MCQs (Q no 3,5,8 Page no 99), Short Question (1,2 Page no 100), Long Question (4, Page no 100)	65%	35%
7. **Legal and Ethical Aspects of Computing System**	7.1 Understanding Terms of Use 7.2 Privacy and Security Threats, (pg # 101-106) 7.4 Computing's Impact on Individuals and Society 7.5 Digital Citizenship and Ethical Considerations, (pg # 108-112). **Exercise:** MCQs (1-4,6-9), SQ (1,2,4,5), LQ (1,3,4).		7.3 The Digital Divide and its Impact (Page no 106-108) **Exercise:** MCQs (Q no 5 Page no 113), Short Question (3, Page no 114), Long Question (2, Page no 114)	83%	17%
8. **Online Research and Digital Literacy**	**No Change**		**No Change**	100%	0%

9. Entrepreneurship in Digital Age	9.1 Design Thinking and Business Solutions 9.2 Creating a Business Plan 9.3 Collecting Market Insights 9.4 Developing Effective Marketing and sales strategies, (pg # 125-133) 9.6 Communication and Storytelling skills 9.7 Collaboration and iteration 9.8 Innovation and Creativity. **Exercise:** MCQs (1-7, 9,10), SQ (1-6,8), LQ (1-5).	9.5 Financial Concepts of Business (Page no 133-135) **Exercise:** MCQs (Q no 8 Page no 140), Short Question (7, Page no 140)	91%	09%

Chapters	Included %		Excluded %
1	68%	→	32%
2	83%	→	17%
3	83%	→	17%
4	100%	→	0%
5	47%	→	53%
6	65%	→	35%
7	83%	→	17%
8	100%	→	0%
9	91%	→	09%

اردو سال اول نیا نصاب اور پیپر پیٹرن

پرانا نصاب

کل اسباق	حصہ غزل	حصہ نظم	حصہ نثر
22	05	07	10

نیا نصاب

کل اسباق	حصہ غزل	حصہ نظم	حصہ نثر
18	04	06	08

حذف شدہ مواد

غزل	نظم	اسباق
"پتا پتا بوٹا بوٹا حال ہمارا جانے ہے" از میر تقی میر	"کھڑا ڈونر" از سید محمد جعفری	1:"چارپائی" از رشید احمد صدیقی
		2:"پاکستانی زبانیں اور ان کا باہمی رشتہ" از ممتاز منگلوری

نیا پیپر پیٹرن

پیپر پیٹرن میں تبدیلی	سوال
محاورات کا اضافہ ، علم بدیع کی اقسام صنعت تضاد ، صنعت مراعات النظیر ، مجاز مرسل ، کنایہ ، مصرع ، شعر	سوال:1 کثیر الانتخابی سوالات
نظم کے دو اشعار کی بجائے چار اشعار دیے جائیں گے ۔ انتخاب کی سہولت ہو گی جو پہلے نہیں ہوتی تھی ۔	سوال:2(جز الف) نظم کے اشعار
غزل کے تین اشعار کی بجائے چھے اشعار دیے جائیں گے ۔ انتخاب کی سہولت ہو گی جو پہلے نہیں ہوتی تھی ۔	سوال:2(جز ب) غزل کے اشعار
چھے نظموں میں سے دو نظموں کا مرکزی خیال یا خلاصہ دیا جائے گا ۔ انتخاب کی سہولت ہو گی جو پہلے نہیں ہوتی تھی ۔	سوال:5 نظم کا مرکزی خیال / خلاصہ
درخواست اور رسید کے سوال میں انتخاب کی سہولت ہو گی جو پہلے نہیں ہوتی تھی ۔	سوال:7 درخواست نویسی یا رسید

Class: 11th   # Subject: Chemistry

Overall Percentage of the Smart Syllabus (ALP)				
Chemistry Class 1st Year Included Percentage= 65 %				
Chapters	**Included Syllabus**	**Excluded Syllabus**	**Included Syllabus %**	**Exclude Syllabus %**
1. Periodic Table and Periodic Properties	Introduction (Page 2) 1.3 Metals, Non-Metals and Metalloids (Page 3) 1.6 Periodic Arrangement and Electronic Configuration (Page 5-6) 1.7 Periodicity of Properties (Page 6-13) 1.8 Reactions of Sodium and Magnesium (Page 13-14) 1.9 Trends in Bonding in oxides and Chlorides or Period 3 (Page 14-16) 1.10 Variation in Oxidation Number in Oxides and Chlorides (Page 16-17) **Multiple Choice Questions (MCQs): III, IV, V, VI, VII, VIII, IX, X, XI, XII** **Short Answer Questions (SAQs): (a), (b), (d), (e), (f), (h), (i), (j), (k), (l), (m)** **Descriptive Questions (DQs): 3, 4, 5, 6**	Topic: 1.1 (Historical Background), 1.2 (Modern Periodic Table-Main Features) (Page 2-3), 1.4 (Blocks in Periodic Table) & 1.5 (Families in Periodic Table) (Page 4-5). **Multiple Choice Questions (MCQs): I, II** **Short Answer Questions (SAQs): (c), (g)**	79%	21%
2. Atomic Structure	2.1 (Atomic Number, Proton Number and Nucleon Number; Identity of an Element) (Page 21-22) 2.2 (Effect of Electric Field on Fundamental particles) (Page 22-23) 2.3 (Experimental Evidences for the Electronic Configuration) (Page 23) Topic 2.3.2 (Ionization	Topic: 2.3.1 (Atomic Spectra) (Page 24), 2.7 (Electronic Configuration and the Periodic Table), 2.8 (Electronic Configuration of Ions and Free Radicals), 2.9 (Electronic Configuration and the Formation of Semiconductors) (Page 35-39)	74%	26%

	Energy and Energy Levels) (Electronic Shells) (Page 25-27) 2.4 (Quantum Numbers) (Page 27-30) 2.5 (Shapes of Atomic Orbitals) (Page 30-31) 2.6 (Electronic Configuration) (Page 31-35) **Multiple Choice Questions (MCQs): I, II, III, IV, V, VI, VII, VIII, IX, X, XI** **Short Answer Questions (SAQs): (a), (b), (c), (d), (e), (h)** **Descriptive Questions (DQs): Q. 3, 4**	**Short Answer Questions (SAQs): (f), (g), (i)** **Descriptive Questions (DQs): Q. 5**		
3. Chemical Bonding	Introduction (Page 44) 3.6 (Valence Bond Theory) (VBT) (Page 51-53) 3.7 (Atomic Orbital Hybridization) (Page 53-56) 3.8 (Valence Shell Electron Pair Repulsion Theory) (VSEPR) (Page 56-63) 3.9 (Molecular Orbital Theory) (MOT) (Page 63-66) **Multiple Choice Questions (MCQs): IV, V, VI, VIII, IX, X, XI** **Short Answer Questions (SAQs): (c), (d), (e), (f), (g), (h), (j)** **Descriptive Questions (DQs): 3, 4, 5, 6, 7**	Topic: 3.1 (Types of Bonding) 3.2 (Electronegativity and the Type of Bond), 3.3 (Intermolecular Forces), 3.4 (Bond Energy and Bond Length), 3.5 (A Comparison among Ionic, Covalent, Metallic Bonds and Intermolecular Forces) (Page 44-51) **Multiple Choice Questions (MCQs): I, II, III, VII, XII** **Short Answer Questions (SAQs): (a), (b), (i), (k), (l), (m), (n), (o), (p)**	74%	26%
4. Stoichiometry	Introduction (Page 70) 4.1 (Concept of Mole) (Page 71-72) 4.2 (Relationship between Mole, Molar Mass and Avogadro's Number) (Page 72-74) 4.3 (Molar Volume) (Page 74-75) 4.4 (Molar Mass and Density of a Gas) (Page 75-76) 4.5 (Molar Concentration) (Page 76-77) 4.6 (Stoichiometric Relationships) (Page 77-81) 4.8 (Theoretical and Actual Yield) (Page 85-86)	Topic: 4.7 (Limiting and Excess Reactant) (Page 81-85), 4.9 (Importance of Stoichiometry in Production and Dosage of Medicines) (Page-87) **Short Answer Questions (SAQs): (g)** (Page-89)	67%	33%

	Multiple Choice Questions (MCQs): I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII **Short Answer Questions (SAQs): (a), (b), (c), (d), (e), (f), (h), (i)** **Descriptive Questions (DQs): Q. 4** **Numerical Problems: Q. 5, 7, 8,**	**Descriptive Questions (DQs): Q. 3** **Numerical Problems: Q. 6**		
5. **States and Phases of Matter**	Introduction (Page 92) 5.1 (Properties of Gases) (Page 92) 5.2 (Ideal Gas Equation) (Page 92-93) 5.3 (Properties of Liquids) (Page 94) 5.4 (Intermolecular Forces) (Page 94-99) 5.5 (Surface Tension of Liquids) (Page 99-100) 5.6 (Viscosity of Liquids) (Page 100) 5.7 (Evaporation) (Page 101) 5.8 (Vapour Pressure) (Page 101-102) 5.9 (Boiling Point) (Page 102-103) 5.12 (Types of Solids) (Page 106-107) 5.13 (Liquid Crystals) (Page 108-109) **Multiple Choice Questions (MCQs): I, II, III, V, VI, VII, VIII, IX, X, XI** **Short Answer Questions (SAQs): (a), (b), (c), (e), (f), (g), (h), (i), (k), (l), (m)** **Descriptive Questions (DQs): Q. 3, 4, 5, 6, 7** **Numerical Problems: No Question Included.**	Topic: 5.10 (Energetics of Phase Change), 5.11 (Solids) (Page 104-105) **Multiple Choice Questions (MCQs): IV** **Short Answer Questions (SAQs): (d), (j)** **Numerical Problems: Q. 8, 9**	91%	9%
6. **Chemical Energetics**	Introduction (Page 112) 6.1 (Enthalpy Change) (Page 113-114) 6.2 (Energy Profile Diagram) (Page 114) 6.3 (Standard Enthalpy Changes) (Page 115-116) 6.4 (Bond Energy (Bond Dissociation Energy) and Enthalpy Changes) (Page 117) 6.5 (Enthalpy Change of Reaction (ΔH_r) and Chemical Bonds) (Page 117-118)	Topic: 6.11 (Entropy), 6.12 (The Free Energy Change ΔG) (Page 139-136)	71%	29%

	6.6 (Measurement of Enthalpy Change of a Reaction) (Page 118-119) 6.7 (Enthalpy Change and Calorie Content of Food) (Page 120) 6.8 (Hess's Law of Heat Summation) (Page 120-124) 6.9 (Energetics of Solution) (Page 124-127) 6.10 (Born-Haber Cycle) (Page 128-129) **Multiple Choice Questions (MCQs): I, II, III, V, VI, VII, VIII, IX, X** **Short Answer Questions (SAQs): (a), (b), (d), (e), (f), (g), (h), (i), (k), (l)** **Descriptive Questions (DQs): Q. 3, 4** **Numerical Problems: Q. 5, 6, 7, 8**	**Multiple Choice Questions (MCQs): IV, XI, XII** **Short Answer Questions (SAQs): (c), (j)** **Numerical Problems: Q. 9, 10**		
7. Reaction Kinetics	Introduction (Page 140-141) 7.1 (Collision Theory) (Page 141) 7.2 (Rate of Reaction) (Page 141-145) 7.3 (Factors Affecting Rate of a Chemical Reaction) (Page 146-149) 7.4 (Rate law, Rate Constant and Order of Reaction) (Page 150-154) **Multiple Choice Questions (MCQs): I, II, III, IV, V, VI, X, XI, XII,** **Short Answer Questions (SAQs): (a), (b), (d), (e), (i), (j)** **Descriptive Questions (DQs): Q. 3, 5** **Numerical Problems: No Question Included.**	Topic: 7.5 (Determination of Rate Constant), 7.6 (Reaction Mechanism) (Page 154-158) **Multiple Choice Questions (MCQs): VII, VIII, IX, XIII** **Short Answer Questions (SAQs): (c), (f), (g), (h), (k), (l), (m), (n), (o)** **Descriptive Questions (DQs): Q. 4, 6** **Numerical Problems: Q. 7, 8**	68%	22%
8. Chemical Equilibrium	Introduction (Page 164) 8.1 (Macroscopic Events and Microscopic Events) (Page 164) 8.2 (Reversible Reactions, Microscopic Events and Chemical Equilibrium) (Page 164-166)	Topic: 8.3 (Relationship between Macroscopic Events and Microscopic Events), 8.4 (Dynamic Equilibrium Between Two Physical States), 8.5 (Conditions for Equilibrium) (Page 166-167), 8.9 (Relationships between Various	59%	41%

	8.6 (Characteristics of Chemical Equilibrium) (Page 168) 8.7 (Types of Equilibrium) (Page 168) 8.8 (Equilibrium Constant and Equilibrium Position) (Page 169-172) 8.10 (Position of Equilibrium and Reaction Conditions) 8.11 (Le-Chatelier's Principle) (Page 175) 8.12 (The Effect of Change of Concentrations) (Page 175-76) 8.13 (The Effect of Change of Pressure or Volume) (Page 176-177) 8.14 (The Effect of Change of Temperature) (Page 177-178) 8.15 (Effect of Catalyst of Equilibrium) (Page 178) **Multiple Choice Questions (MCQs): I, III, V, VI, VIII, IX, X** **Short Answer Questions (SAQs): (a), (b), (c), (d), (f), (g),** **Descriptive Questions (DQs): Q. 3, 4, 5, 6, 7**	Equilibrium Constants), (Page 172-175), 8.16 (Industrial Applications of Chemical Equilibrium) (Page 179-181) **Multiple Choice Questions (MCQs): II, IV, VII** **Short Answer Questions (SAQs): (e), (h), (i)** **Descriptive Questions (DQs): Q. 8, 9**		
9. Acid-Base Chemistry	Introduction (Page 185-186) 9.3 (Ionic Product of Water) (Page 188) 9.4 (pH and pOH) (Page 189-191) 9.5 (Ionization Constant of Acids) (K_a) (Page 191-193) 9.6 (Common Ion Effect) (Page 193-194) 9.7 (Buffer Solutions) (Page 195-196) 9.8 (Solubility Product) (Page 197-200) **Multiple Choice Questions (MCQs): II, III, VIII, X, XI** **Short Answer Questions (SAQs): (a), (b), (g), (h), (i), (j), (l)**	Topic: 9.1 (Bronsted-Lowry Concept), 9.2 (Lewis Concept of Acids and Bases) (Page 186-188), 9.9 (Salt Hydrolysis), 9.10 (Acid Base Indicators) (Page 200-204) **Multiple Choice Questions (MCQs): I, IV, V, VI, VII, IX** **Short Answer Questions (SAQs): (c), (d), (e), (f), (k)**	64%	36%

	Included	Excluded		
	Descriptive Questions (DQs): Q. 5, 6, **Numerical Problems: Q. 8, 9 ,10**	**Descriptive Questions (DQs): Q. 3-4, 7** **Numerical Problems: No Question Excluded.**		
10. Electrochemistry	Introduction (Page 208) 10.1 (Oxidation, Reduction and Redox Reactions) (Page 208) 10.2 (Oxidation Number and Its Significance) (Page 209-211) 10.3 (Disproportionation Reaction) (Page 211) 10.4 Oxidizing Agent (oxidant) and Reducing Agent (Reductant) (Page 211-212) 10.5 (Balancing of Redox Equations by Oxidation Number Method) (Page 212-214) 10.6 (Electrolytic Cell) (Page 214-215) 10.7 (Redox Reaction in electrolysis) (Page 215) 10.11 (Electrode Potentials) (Page 219-220) 10.12 (Standard Hydrogen Electrode SHE) (Page 220-221) 10.13 (Standard Electrode Potential) (E^o) (Page 221) 10.14 (Measuring Standard Electrode Potentials) (Page 221-222) 10.15 Electrochemical Cell (Galvanic Cell) (Page 223-224) 10.21 (Photovoltaic Cells) (Page 231) **Multiple Choice Questions (MCQs): III, IV, V, VI, VII, XII** **Short Answer Questions (SAQs): (a), (b), (c), (d), (e), (f), (k)** **Descriptive Questions (DQs): Q. 5, 6** **Numerical Problems: No Question Included.**	Topic: 10.8 (Mass of Substance Deposited During Electrolysis), 10.9 (Amount of Substance Produced During Electrolysis), 10.10 (Avogadro's Constant by the Electrolytic Method) (Page 216-219), 10.16 (Applications of E^o Values), 10.17 (Variation of E^o with Ion Concentration), 10.18 (Nernst Equation), 10.19 (Activity Series of Metals), 10.20 (Feasibility of Redox Reactions from Activity Series of Reaction Data) (Page 224-230), 10.22 (Winkler Method, BOD and DO) (Page 231-232) **Multiple Choice Questions (MCQs): I, II, VIII, IX, X, XI** **Short Answer Questions (SAQs): (g), (h), (i), (j)** **Descriptive Questions (DQs): Q. 3-4** **Numerical Problems: Q. 7-9**	62%	38%
11. Hydrocarbons	Introduction (Page 237) 11.1 (Aliphatic and Aromatic Hydrocarbons) (Page 237)	Topic: 11.9 (Conjugated Dienes), 11.10 (Isomerism), 11.11 (Organic Redox Reactions) (Page 257-261)	83%	17%

	11.2 (Nomenclature) (Page 238-243) 11.3 (Reaction Mechanism and Modes of Bond Breaking) (Page 243-244) 11.4 (Unreactive Nature of Alkanes towards Polar Reagent) (Page 244) 11.5 (Reactions of Alkanes) (Page 245-246) 11.6 (Alkanes (Page 247-248) 11.7 (Structure and Reactivity of Alkanes) (Page 248-251) 11.8 (Reactions of Alkenes) (Page 251-257) **Multiple Choice Questions (MCQs): II, III, IV, V, VI, VII, VIII, IX, XI, XII** **Short Answer Questions (SAQs): (b), (c), (d), (e), (g), (i), (k)** **Descriptive Questions (DQs): Q. 3, 4, 5**	**Multiple Choice Questions (MCQs): I, X** **Short Answer Questions (SAQs): (a), (f), (h), (j), (l)** **Descriptive Questions (DQs): Q. 6**		
12. Nitrogen and Sulfur	(Nitrogen) (Page 265-266) 12.1 (Reactivity of Nitrogen) (N_2) (Page 266) 12.2 (Ammonia) (NH_3) (Page 266-267) 12.3 (Oxides of Nitrogen) (Page 268) 12.4 (Sources of Oxides of Nitrogen) (Page 269) 12.5 (Role of NO & NO_2 in Smog and PAN Formation) (Page 269-270) 12.6 (Catalytic Converter) (Page 270-271) 12.7 (Nitrification and Denitrification) (Page 271-272) 12.8 (Sulfur) (Page 272-273) 12.9 (Stability of Oxidation States of Sulfur) (Page 273-274) 12.10 (Reactions of Sulfur) (Page 274) 12.11 (Uses of Sulfur and Its Compounds) (Page 275)	Topic: 12.12 (Role of Sulfur in Organic Synthesis), 12.13 (Sulfuric Acid) (Page 275-280) **Multiple Choice Questions (MCQs): IX, X, XI, XII**	67%	33%

	Multiple Choice Questions (MCQs): I, II, III, IV, V, VI, VII, VIII **Short Answer Questions (SAQs): (a), (b), (c), (d), (e), (f), (g), (h), (j), (k),** **Descriptive Questions (DQs): Q. 3, 4,**	**Short Answer Questions (SAQs): (i), (l), (m), (n), (o), (p)** **Descriptive Questions (DQs): Q. 5-6**		
13. Halogens	(Introduction) (Pg. 283-284) 13.1 (Volatility of Chlorine, Bromine, Iodine) (Page 285) 13.2 (Trends in Volatility of the Halogens) (Page 285) 13.3 (The Bond Strength of Halogen Molecule) (Page 286) 13.4 (Relative Reactivities of the Halogens as Oxidizing and Reducing Agents) (Page 286) 13.5 (Reactions of the Halogens with the Hydrogen) (Page 287-288) 13.11 (Use of Chlorine in Water Purification) (Page 293-294) **Multiple Choice Questions (MCQs): I, II, VI, VIII** **Short Answer Questions (SAQs): (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (l)** **Descriptive Questions (DQs): Q. 4**	Topic: 13.6 (Relative Thermal Stabilities of Hydrogen Halides in Terms of the Bond Strengths), 13.7 (Relative Reactivities of Halide Ions as Reducing Agents), 13.8 (Reactions of Halides with Aqueous Silver Ion Followed by Aqueous Ammonia), 13.9 (Reactions of Halides (X^-) with Concentrated Sulfuric Acid), 13.10 (Reactions of Chlorine with Cold and Hot Aqueous Sodium Hydroxide) (Page 288-293) **Multiple Choice Questions (MCQs): III, IV, V, VII, IX, X** **Short Answer Questions (SAQs): (k), (m), (n), (o)** **Descriptive Questions (DQs): Q. 3 & 5**	57%	43%
14. Atmosphere	(Introduction) (Page 297) 14.1 (Layers of Atmosphere) (Page 298) 14.2 (Air Pollutants) (Page 298-299) 14.3 (Sources of Air Pollution) (Page 299) 14.4 (Sources of Air Pollutants) (Page 300-302) 14.5 (Impact of Human Activities on Health) (Page 303) 14.6 (Effects of Air Pollution) (Page 304-305)	Topic: 14.8 (Air Quality), 14.9 (Air Quality and Human Health), 14.10 (Air Quality and Health Risk), 14.11 (Methods & Techniques to Measure & Monitor Air Quality), 14.12 (Experiments and Data Collection to Test Hypothesis about Air Quality), 14.13 (Analyze Data and Interpret Air Quality), 14.14 (Strategies Used to Reduce Air Pollution),	65%	35%

	14.7 (Greenhouse Effect and Global Warming) (Page 305-306) **Multiple Choice Questions (MCQs): I, II, V, VI, VII, IX, X,** **Short Answer Questions (SAQs): (a), (b), (c), (f), (g), (j)** **Descriptive Questions (DQs): Q. 3, 4, 5**	14.15 (Laws and Regulations Related to Atmosphere), 14.16 (Economic, Social & Political Issues) (Page 306-311) **Multiple Choice Questions (MCQs): III, IV, VIII, XI** **Short Answer Questions (SAQs): (d), (e), (h), (i), (k), (l), (m)** **Descriptive Questions (DQs): Q. 6**		
15. Basic Separation Techniques	Nothing is included.	Full Chapter is Deleted/ Excluded	00%	100 %
16. Lab Safety and Practical Skills	Nothing is included.	Full Chapter is Deleted/ Excluded	00%	100 %

Class: 11th   # Subject: Mathematics

Total Units	Total questions	Included questions	Excluded questions	Included %age	Excluded % age
(1-14)	765	503	262	66%	34%

Chapter wise syllabus reduction report of Math Book for grade 11th

Units:	Total questions	Included questions	Excluded questions	Included %age	Excluded % age
1	68	40	28	59%	41%
2	28	24	4	86%	14%
3	21	13	8	62%	38%
4	45	28	17	62%	38%
5	28	28	0	100%	0%
6	161	106	55	66%	34%
7	70	59	11	84%	16%
8	77	0	77	0%	100%
9	27	27	0	100%	0%
10	54	48	6	89%	11%
11	19	16	3	84%	16%
12	37	25	12	68%	32%
13	40	28	12	70%	30%
14	90	61	29	67%	33%
Total	**765**	**503**	**262**	**66%**	**34%**

Exercise wise syllabus reduction report of Math Book for grade 11th:

Units	Total	Included Questions	Excluded Questions+ Topics	Included syllabus %	Excluded syllabus %
Unit:1		Remaining	1.4.1 The Polar Form of a Complex Number, Operations on Complex Numbers in Polar Form, Examples 12 to 16; Pages # 15 to 18. • 1.5 Complex Numbers in the Real World, Examples 17 & 18; Pages # 19 to 20. • Exercise # 1.5: Q # 2 to Q # 22; Pages # 20 to 21.		
Examples	(1-18)	(1,2,3,4,5,6,7,8,9,10,11)	(12,13,14,15,16,17,18)	61%	39%

Ex.1.1	Qs (1 -6)	Qs (1 -6)	Nil	100%	0%
Ex.1.2	Qs (1-5)	Qs (1-5)	Nil	100%	0%
Ex.1.3	Qs (1-8)	Qs (1-8)	Nil	100%	0%
Ex.1.4	Qs (1-9)	Qs (1-9)	Nil	100%	0%
Ex.1.5	Q.(1-22)	Qs (1)	Qs (2-22)	5%	95%
Total	**68`**	**40**	**28**	**59%**	**41%**
Unit:2		Remaining	2.5 Real Life Applications, Examples 12 & 13; Pages # 31 to 32. • Exercise # 2.2: Q # 4 & Q # 5; Page # 33.		
Examples	(1-13)	(1,2,3,4,5,6,7,8,9,10,11)	(12,13)	85%	15%
Ex.2.1	Qs (1 -10)	Qs (1 -10)	Nil	100%	0%
Ex.2.2	Qs (1 -5)	Qs (1 -3)	Qs (4,5)	60%	40%
Total	**28**	**24**	**4**	**86%**	**14%**
Unit :3		Remaining	• 3.5 Real World Problems of Quadratic Equations and Inequalities, Examples 9 & 10; Pages # 41 to 42. • Exercise # 3.2, Q # 2 to Q # 7; Page # 43.		
Examples	(1-10)	(1,2,3,4,6,7,8)	(9,10)	80%	20%
Ex.3.1	Qs (1 -4)	Qs (1 -4)	Nil	100%	0%
Ex.3.2	Qs.(1-7)	Qs(1)	Qs(2,3,4,5,6,7)	14%	86%
Total	**21**	**13**	**8**	**62%**	**38%**
Unit:4		Remaining	• 4.6 Elementary Row Operation on a Matrix; Page # 61 • 4.7 Echelon and Reduced Echelon Form of Matrices, Examples 8 to 10; Pages # 62 to 64. • 4.8 System of Non-Homogeneous Linear Equations, Example # 11; Pages # 64 to 67. • 4.9 System of Homogeneous Linear Equations, Examples 14 & 15; Pages # 71 to 74. • 4.10 Applications of Matrices in Real World, Examples 16 & 17; Pages # 74 to 76. • Exercise # 4.3: Q # 1, 2, 5, 6, 7, 8, 9, 10 & 11; Pages # 76 to 77.		
Examples	(1-17)	(1,2,3,4,5,6,7,12,13)	(8,9,10,11,14,15,16,17)	53%	47%
Ex.4.1	Qs (1 -7)	Qs (1 -7)	Nil	100%	0%
Ex.4.2	Qs (1 -10)	Qs (1 -10)	Nil	100%	0%
Ex.4.3	Qs (1 -11)	Qs (3,4)	Qs (1,2,5,6,7,8,9,10,11)	18%	82%
Total	**45**	**28**	**17**	**62%**	**38%**

Unit:5		All	Nil		
Examples	(1-7)	(1,2,3,4,5,6,7)	Nil	100%	0%
Ex.5.1	Qs (1 -15)	Nil	Nil	100%	0%
Ex.5.2	Qs (1 -6)	Qs (1 -6)	Nil	100%	0%
Total	**28**	**28**	Nil	**100%**	**0%**
Unit:6		Remaining	Exercise # 6.2: Q # 20, 21, 22 & 23; Page # 94. • Exercise # 6.3: Q # 6; Page # 95. • Exercise # 6.4: Q # 17, 18 & 19; Page # 99. • Exercise # 6.5: Q # 7, 8, 9, 10 & 14; Page # 102. • Exercise # 6.6: Q # 7 & 8; Page # 104. • Exercise # 6.7: Q # 6; Page # 105. • 6.8 Arithmetico-Geometric Progression, Example 19, Examples 20 & 21; Pages # 106 to 109. • Exercise # 6.8 (Complete); Pages # 109 to 110. • Exercise # 6.9: Q # 13, 14, 15, 16, 17 & 18; Page # 114. • 6.11 Real Life Problems involving Sequences and Series, Examples 27 to 31; Pages # 117 to 120. • Exercise # 6.11 (Complete); Pages # 121 to 122.		
Examples	(1-31)	1,….,19,22,23,24,25,26	(20,21,27,28,29,30,31)	77%	23%
Ex.6.1	Qs (1 -4)	Qs (1 - 4)	Nil	100%	0%
Ex.6.2	Qs (1 - 23)	Qs (1 -19)	Qs (20,21,22,23)	83%	17%
Ex.6.3	Qs (1 - 7)	Qs (1,2,3,4,5,7)	Qs (6)	86%	14%
Ex.6.4	Qs (1-19)	Qs (1,….16)	Qs(17,18,19)	84%	16%
Ex.6.5	Qs (1 -15)	Qs (1,…6,11,12,13,15)	Qs (7,8,9,10,14)	67%	23%
Ex.6.6	Qs (1 -8)	Qs (1,2,3,4,5,6)	Qs (7,8)	75%	25%
Ex.6.7	Qs (1 -6)	Q.1,2,3,4,5	Q.6	83%	17%
Ex.6.8	Qs (1 -11)	Nill	Qs (1 -11)	0%	100%
Ex.6.9	Qs (1 -18)	Qs (1 -12)	Qs (13,14,15,16,17,18)	67%	33%
Ex.6.10	Qs (1 -4)	Qs (1 -4)	Nil	100%	0%
Ex.6.10	Qs (1 -15)	Nil	Qs (1 -15)	0%	100%
Total	**161**	**106**	**55**	**66%**	**34%**
Unit:7		Remaining	• Exercise # 7.2: Q # 6, 9 & 11; Page # 129. • Exercise # 7.3: Q # 9, 10 & 11; Page # 132. • Exercise # 7.4: Q # 4, 5, 6, 17 & 18; Pages # 138 to 139..		

Examples	(1-14)	(1,..,14)	Nil	100%	0%
Ex.7.1	Qs (1 -7)	Qs (1,2,3,4,5,6,7)	Nil	100%	0%
Ex.7.2	Qs (1 -15)	Qs(1,2,3,4,5,7,8,10,12,,15)	Qs (6,9,11)	80%	20%
Ex.7.3	Qs (1 -14)	Qs(1,2,3,4,5,6,7,8,12,13,14)	Qs (9,10,11)	79%	21%
Ex.7.4	Qs (1 -20)	Qs. (1,2,3,7,…,16,19,20)	Qs (4,5,6,17,18)	75%	25%
Total	**70**	**59**	**11**	**84%**	**16%**
Unit:8		Nil	**Complete unit is deleted / excluded.**	0%	100%
Unit:9		All Topic	Nil		
Examples	(1-10)	(1,2,3,4,5,6,7,8,9,10)	Nil	100%	0%
Ex.9.1	Qs (1 -10)	Qs.(1,2,3,4,5,6,7,8,9,10)	Nil	100%	0%
Ex.9.2	Qs (1 -7)	Qs.(1,2,3,4,5,6,7)	Nil	100%	0%
Total	**27**	**27**	**0**	**100%**	**0%**
Unit: 10		Remaining	• 10.6 Triple Angle Identities, Pages # 192 to 193. • Exercise # 10.3, Q # 2 (viii, ix, x & xii), Q # 5; Pages # 194 to 195. • Exercise # 10.4, Q # 6, 7, 8, 9 &10; Page # 199.		
Examples	(1-18)	(1,2,3---,18)	Nil	100%	0%
Ex.10.1	Qs (1 -6)	Qs (1 -6)	Nil	100%	0%
Ex.10.2	Qs (1 -15)	Qs (1 -15)	Nil	100%	0%
Ex.10.3	Qs (1 -5)	Qs {1,2(i,..,vii,xi,xiii,xiv,xv),3,4}	Qs{2(viii,ix,x,xii),5}	80%	20%
Ex.10.4	Qs (1 -10)	Qs (1 -5)	Qs (6 -10)	50%	50%
Total	**54**	**48**	**6**	**89%**	**11%**
Unit: 11		Remaining	• 11.4.1 Graph of Trigonometric Functions; Pages # 205 to 206. • 11.4.2 Graph of y = sin x; Pages # 206 to 207. • 11.4.3 Graph of y = cos x; Pages # 207 to 209. • 11.4.4 Graph of y = tan x; Pages # 209 to 210. • Exercise # 11.2 (Complete); Page # 211.		
Examples	(1-5)	(1,2,3,4,5)	Nil	100%	0%
Ex.11.1	Qs (1,2)	Qs (1 ,2)	Nil	100%	0%
Ex.11.2	Qs (1 -3)	Nil	Qs (1 -3)	0%	100%
Ex.11.3	Qs (1 -9)	Qs (1 -9)	Nil	100%	0%
Total	**19**	**16**	**3**	**84%**	**16%**
Unit: 12		Remaining	• 12.4 Application of Transcendental Functions to Limits and Continuity on Real World Problems, Examples 14 to 17; Pages		

			# 234 to 235. • Exercise # 12.3 (Complete); Pages # 235 to 236.		
Examples	(1-17)	(1,2,3,..13)	(14,15,16,17)	76%	24%
Ex.12.1	Qs (1 -5)	Qs (1 -5)	Nil	100%	0%
Ex.12.2	Qs (1 -7)	Qs.(1,2,,3,4,5,6,7)	Nil	100%	0%
Ex.12.3	Qs (1 -8)	Nil	Qs.(1,2,3,4,5,6,7,8)	0%	100%
Total	**37**	**25**	**12**	**68%**	**32%**
Unit: 13		Remaining	• 13.7 Applications of Differentiation, Examples 12 to 15; Pages # 255 to 256. • Exercise # 13.3 (Complete); Pages # 256 to 257.		
Examples	(1-15)	(1,2,3,---,10,11)	(12,13,14,15)	73%	27%
Ex.13.1	Qs (1 -12)	Qs (1,2,3,--,11,12)	Nil	100%	0%
Ex.13.2	Qs (1 -5)	Qs.(1,2,3,4,5)	Nil	100%	0%
Ex.13.3	Qs (1 -8)	Nil	Qs (1 -8)	0%	100%
Total	**40**	**28**	**12**	**70%**	**30%**
Unit: 14		Remaining	• Exercise # 14.1: Q # 9 & 10; Page # 266. • Exercise # 14.2: Q # 7, 8 & 12; Page # 274. • 14.4 Scalar Triple Product, Examples 23 to 31; Pages # 283 to 288. • Exercise # 14.4 (Complete); Pages # 289 to 290.		
Examples	(1-31)	(1,…,21,22)	(23,…31)	71%	29%
Ex.14.1	Qs (1 -12)	Qs (1,…,8,11,12)	Qs (9,10)	83%	17%
Ex.14.2	Qs (1 -16)	Qs (1,..,6,9,10,11,13,14)	Qs (7,8,12)	81%	19%
Ex.14.3	Qs (1 -16)	Qs (1 -16)	Nil	100%	0%
Ex.14.4	Qs (1 -15)	Nil	Qs (1 -15)	0%	100%
Total	**90**	**61**	**29**	**67%**	**33%**

Class 11th   Subject: -Physics

Included Syllabus %			Excluded Syllabus %		
80%			20%		
Chapters	**Included Syllabus**		**Excluded Syllabus**	**Included Syllabus %**	**Excluded Syllabus %**
1. Measurements	**Topics** • **1.3 Uncertainty in Measurement** (Pg 5–6) • **1.4 Use of significant figures** (Pg 6–8) • **1.5 Precision and Accuracy** (Pg 8–9) • **1.6 Assessment of total uncertainty in the final result** (Pg 9-11) • **1.7 Dimensions of physical quantities** (Pg 12–14) **Exercise: MCQs** (Pg ~*14-16*): 1.1, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.15 **Short Answer Questions** (Pg ~*16*): 1.2, 1.6, 1.7, 1.8 **Constructed Response Questions** (Pg ~*16-17*): 1.2, 1.4, 1.10, 1.12 **Comprehensive Questions** (Pg ~*17-18*): 1.1, 1.2, 1.3(part-a),1.4,1.5 **Numerical Problems** (Pg ~*18*): 1.3, 1.4,1.5,1.6,1.7		1.1 Physical quantities and their units (Page 2) 1.2 International system of units (Page 2-5) **MCQs:** 1.2, 1.3, 1.4, 1.14, 1.16 **Short answer questions:** 1.1, 1.3, 1.4, 1.5 **CRQs:** 1.1, 1.3, 1.5, 1.6, 1.7, 1.8, 1.9, 1.11 **Comprehensive Question:** 1.3 (part-b) **Numerical Problems:** 1.1, 1.2, 1.8	80	20
2. Force and Motion	**Topics** • **2.3 Product of Two Vectors** (Pg 22–25) • **2.5 Motion Under Gravity** (Pg 30–31) – • **2.6 Projectile Motion**(Pg 31–34) – • **2.7 Momentum**(Pg 35–37) – • **2.8 Elastic & inelastic collission**(Pg 38–39) – • **2.9 Inelastic Collission in one dimension**(Pg 40–41) – **Exercise** • **MCQs (Pg ~45):** 2.1, 2.2, 2.3, 2.4, 2.5, 2.6,2.7,2.9 • **Short Answer Questions (Pg ~45-46):**		2.1 Scalars 2.2 Vectors 2.4 Derivation of equations of motion by graphical method 2.10 Elastic collision in two dimensions 2.11 Inelastic collision in two dimensions 2.12 Rocket propulsion **Examples:** 2.1, 2.4 **MCQs:** 2.8	70	30

	2.1, 2.2, 2.3, 2.4, 2.5, 2.6,2.8 • **Constructed Response Questions (Pg ~46):** 2.1,2.2, 2.5 • **Comprehensive Questions (Pg ~46):** 2.1, 2.2, 2.4, 2.5, 2.6 • **Numerical Problems (Pg ~46-47):** 2.1, 2.2, 2.3, 2.5, 2.6, 2.7,2.8,2.9	**Short answer questions:** 2.7 **CRQs:** 2.3, 2.4 **Comprehensive Questions:** 2.3, 2.7, 2.8 (only inelastic collision in two dimension) **Numerical Problems:** 2.4, 2.10, 2.11, 2.12		
3. Circular and Rotational Motion	**Topics:** 3.1 Angular Measurements (Pg 49-53) 3.2 Centripetal Force (Pg 53-55) 3.3 Artificial Satellites (Pg 56–59) 3.4 moment of inertia (Pg 59-60) 3.5 Angular Momentum (Pg 61–62) 3.6 Law of conservation of Angular Momentum (Pg 62–63) **Exercise** **M.C.Q (Pg ~65):** 3.1, 3.2, 3.3, 3.4, 3.5, 3.7, 3.10 **Short Answer Questions (Pg ~66):** 3.1, 3.2, 3.4, 3.5, 3.7, 3.9 **Constructed Response Questions (Pg ~66–67):** 3.1, 3.3, 3.4, 3.7, 3.9, 3.10 **Comprehensive Questions (Pg ~67):** 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7 **Numerical Problems (Pg ~67–68):** 3.1, 3.2, 3.4, 3.6, 3.7, 3.8, 3.9,	• Applications of centripetal force • Flywheel • The gyroscope Example: 3.2 **MCQs:** 3.6, 3.8, 3.9 **Short answer questions:** 3.3, 3.6, 3.8 **CRQs:** 3.2, 3.5, 3.6, 3.8 **Numerical Problems:** 3.3, 3.5, 3.10	**80**	**20**
4. Work, Energy and Power	**Ch 04: Work, Energy and Power** **Topics:** 4.2 Work Done by a Variable Force (Pg 70–71) 4.3 Conservative and Non-Conservative Forces (Pg 72–73) 4.4 Power (Pg 73–74) 4.6 Escape Velocity (Pg 79) 4.7 Work-Energy Theorem (Pg 79-80) 4.8 Interconversion of Potential Energy and Kinetic Energy (Pg 81–82)	4.1 Work done by a constant force 4.5 Energy (K.E) • Examples: 4.3 and 4.5 **MCQs:** 4.2, 4.4, 4.8, 4.9 **Short answer questions:** 4.2, 4.5, 4.8, 4.9 **CRQs:** 4.2, 4.3, 4.5, 4.7 **Comprehensive Questions:**	**74**	**26**

	Exercise **M.C.Q (Pg ~83-84):** 4.1, 4.3, 4.5, 4.6, 4.7, 4.10 **Short Answer Questions (Pg ~84–85):** 4.1, 4.3, 4.4, 4.6, 4.7, 4.10 **Constructed Response Questions (Pg ~85):** 4.1, 4.4, 4.6, **Comprehensive Questions (Pg ~85):** 4.3, 4.4, 4.5, 4.6 **Numerical Problems (Pg ~86):** 4.1, 4.3, 4.4, 4.5, 4.6, 4.9,	4.1, 4.2 (part-i) **Numerical Problems:** 4.2, 4.7, 4.8, 4.10		
5. Solids and Fluid Dynamics	**Topics:** 5.2 Mechanical Properties of Solids (Pg 89) 5.3 Stress, Strain and Young's Modulus (Pg 90–91) 5.5 Elastic Deformation, Plastic Deformation and Elastic Limit (Pg 92–93) 5.6 Strain Energy in Deformed Materials (Pg 93–94) 5.7 Archimedes' Principle and Floatation (Pg 94–97) 5.8 Steady, Non-Viscous and Ideal Fluid (Pg 97–99) 5.9 Equation of Continuity (Pg 99–101) 5.11 Bernoulli's Equation (Pg 101–103) 5.12 Uses of Bernoulli's Equation (Pg 103–106) 5.13 Viscous Drag and Stokes' Law (Pg 106) 5.14 Terminal Velocity (Pg 106–107) **Exercise** **M.C.Q (Pg ~109):**5.1, 5.2, 5.4, 5.5, 5.6, 5.7, 5.8, 5.10, 5.11, **Short Answer Questions (Pg ~110):**5.1, 5.2, 5.3, 5.4, , 5.7, 5.8, 5.9,5.11 **Constructed Response Questions (Pg ~110):**5.1, 5.3, 5.4, **Comprehensive Questions (Pg ~111):**, 5.2, 5.3, 5.5, 5.6, 5.7, 5.8 **Numerical Problems (Pg ~111):**5.1, 5.2, , 5.4, 5.7, 5.8	5.1 Classification of solids 5.4 Determination of Young's modulus of a wire 5.10 Increase in flow velocity 5.15 Real fluids are viscous fluids 5.16 Superfluid's **MCQs:** 5.3, 5.9, 5.12 **Short answer questions:** 5.5, 5.6, 5.10 **CRQs:** 5.2, 5.5, 5.6 **Comprehensive Questions:** 5.1, 5.4 **Numerical Problems:** 5.3, 5.5, 5.6	**70**	**30**
6. Heat and Thermodynamics	**Topics:** 6.2 Internal Energy (Pg117) 6.3 Heat and work (Pg 118) 6.4 First Law of Thermodynamics (Pg 119) 6.5 Reversible and Irreversible Processes (Pg 121–122)	6.1 Assumptions of the kinetic theory of gasses 6.6 Heat engine • Example: 6.1 **MCQs:** 6.3, 6.4, 6.7, 6.8, 6.10	**70**	**30**

	6.7 2nd Law of Thermodynamics (Pg 122–123) 6.8 Carnot Engine & Carnot Theorem(Pg 123–125) 6.9 Refrigerator (Pg 125-126) 6.10 Entropy (Pg 126-128) **Exercise** **M.C.Q (Pg ~128–129):**6.1, 6.2, 6.5, 6.6, 6.9, **Short Answer Questions (Pg ~129):**6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.12 **Constructed Response Questions (Pg ~130):**6.1, 6.2, 6.3, **Comprehensive Questions (Pg ~130):**6.3, 6.4, 6.5, 6.6 **Numerical Problems (Pg ~130-131):**, 6.3, 6.4, 6.5, 6.6,	**Short answer questions:** 6.1, 6.2, 6.9, 6.10, 6.11 **CRQs:** 6.4, 6.5 **Comprehensive Questions:** 6.1, 6.2 **Numerical Problems:** 6.1, 6.2, 6.7, 6.8		
7. Waves and Vibrations	**Topics:** 7.2 Principle of Superposition of Waves (Pg 134–136) 7.3 Interference and Its Types (Pg 136–139) 7.5 Stationary Waves on a Stretched String (Pg 140–143) 7.6 Stationary Waves in Air Columns (Pg 143–148) 7.7 Experiment Demonstrating Stationary Waves Using Microwaves (Pg 149) 7.8 Diffraction of Waves (Pg 150–151) 7.9 Beats (Pg 151–153) 7.10 Intensity (I) of a Wave (Pg 154–156) 7.11 Doppler Effect (Pg 156–160) 7.12 Applications of Doppler Effect (Pg 160–162) **Exercise** **M.C.Q (Pg 163–164):**7.2, 7.5, 7.6, 7.7, 7.8, 7.10, 7.11, 7.12 **Short Answer Questions (Pg 164–165):**7.1, 7.2, 7.3, 7.6, 7.7 **Constructed Response Questions (Pg 165):**7.2, 7.4, 7.5 **Comprehensive Questions (Pg 165):**7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7 **Numerical Problems (Pg 166):**7.3, 7.6, 7.7, 7.8, 7.9, 7.10	7.1 Waves 7.4 Stationary waves and their formation • Tuning musical instruments **Examples:** 7.6, 7.9 **MCQs:** 7.1, 7.3, 7.4, 7.9 **Short answer questions:** 7.4, 7.5 **CRQs:** 7.1, 7.3 **Numerical Problems:** 7.1, 7.2, 7.4, 7.5	**80**	**20**
8. Physical Optics and Gravitational	**Topics:** 8.1 Polarization of Light (Pg 167–168) 8.3 Production and Detection of Plane Polarized Light (Pg 169–170) 8.4 Polarization of Light by the Method of Reflection (Pg170–172)	8.2 Types of polarization • Optical activity • Space-time distortion / tidal forces	**60**	**40**

Waves	8.5 Malus's Law (Pg 172–176) 8.6 Gravitational Waves (GWs) (Pg 176–178) 8.7 Interferometer (Pg 179–181) **Exercise** **M.C.Q (Pg 182–183):**8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.11, 8.12, 8.13 **Short Answer Questions (Pg 183):**8.1, 8.2, 8.3, **Constructed Response Questions (Pg 183):**8.1, 8.2, 8.3, 8.5, **Comprehensive Questions (Pg 183–184):** 8.2, 8.3, 8.4, 8.5, 8.6, 8.7 **Numerical Problems (Pg 184):**8.2, 8.3, 8.4, 8.6, 8.7, 8.8, 8.10, 8.11	**Examples:** 8.5, 8.6 **MCQs:** 8.5, 8.8, 8.9, 8.10 **Short answer questions:** 8.4, 8.5 **CRQs:** 8.4, 8.6 **Comprehensive Question:** 8.1, 8.8 **Numerical Problems:** 8.1 (Only classify the polarization of waves), 8.5, 8.9		
9. Electrostatics and Current Electricity	**Topics** **9.1 Coulomb's Law** (Pg 186–187) **9.2 Electric Field Strength** (Pg 188–189) **9.3 Electric Flux** (Pg 191-193) **9.4 Gauss's Law** (Pg 193-194) **9.5 Electric Potential** (Pg 195–197) **9.6 Electron Volt** (Pg 197-198) **9.10 Electric Current** (Pg 201–202) **9.11 Current Through a Conductor** (Pg 202–203) **9.12 Ohm's Law** (Pg 203) **9.13 Resistivity and Its Dependence Upon Temperature** (Pg 203-205) **9.14 Electrical Power** (Pg 206) **9.15 Electromotive Force (EMF) and Potential Difference** (Pg 206–208) **9.16 Kirchhoff's Rules** (Pg 208–212) **9.17 Wheatstone Bridge** (Pg 212–213) **9.18 Potentiometer** (Pg 213–214) **9.20 Thermistors** (Pg 215–216) **9.21 Light Dependent Resistor (LDR)** (Pg 216–218) **Exercise** **Multiple Choice Questions (Pg 218–219):**9.1, 9.2, 9.4, 9.5, 9.7, 9.8, 9.9, **Short Answer Questions (Pg 219):**9.1, 9.2, 9.4, 9.5, 9.6, 9.7,	• Electric field lines • Applications of Gauss's law 9.7 Motion of charged particles in a uniform electric field 9.8 Path of a charged particle 9.9 Shielding from external electric field 9.19 Use of a galvanometer Examples: 9.9, 9.11 **MCQs:** 9.3, 9.6, 9.10 **Short answer questions:** 9.3, 9.8, 9.9 **CRQs:** 9.1, 9.2, 9.3 **Numerical Problems:** 9.3, 9.4, 9.7, 9.9	**70**	**30**

	Constructed Response Questions (Pg 220):9.4, 9.5, 9.6 Comprehensive Questions (Pg 220):9.1, 9.2, 9.3, 9.4, 9.5 Numerical Problems (Pg 220–221):9.1, 9.2, 9.5, 9.6, 9.8, 9.10			
10. Electromagnetism	**Topics** **10.1 Force on a Current-Carrying Conductor in a Uniform Magnetic Field** (Pg 223–224) **10.2 Magnetic Flux and Flux Density** (Pg 225–226) **10.4 Motion of a Charged Particle in a Magnetic Field** (Pg 227-228) **10.6 Induced EMF and Faraday's Law** (Pg 231–233) **10.8 Factors Affecting EMF** (Pg 236) **10.9 Ferrofluids** (Pg 236–238) **10.10 A Seismometer** (Pg 238–239) **Exercise** **Multiple Choice Questions (Pg 239-240):**10.1, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, **Short Answer Questions (Pg 240):**10.2, 10.3, 10.8, 10.9 **Constructed Response Questions (Pg 241):**10.1, 10.4, 10.5, 10.6, 10.7, 10.9 **Comprehensive Questions (Pg 242):**10.1, 10.2, 10.4, 10.6 **Numerical Problems (Pg 242-243):**10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.10	10.3 Magnetic flux linkage 10.5 Velocity selector 10.7 Lenz's law Examples: 10.2, 10.4, 10.5 and 10.7 **MCQs:** 10.2, 10.3, 10.10 **Short answer questions:** 10.1, 10.4, 10.5, 10.6, 10.7 **CRQs:** 10.2, 10.3, 10.8 **Comprehensive Questions:** 10.3 (only Lenz's law), 10.5 **Numerical Problems:** 10.7, 10.8, 10.9, 10.11, 10.12	**80**	**20**
11. Special Theory of Relativity	**Chapter 11: Special Theory of Relativity** **11.1 Relative Motion** (Pg244–245) **11.2 Frames of Reference** (Pg 245–246) **11.3 Special Theory of Relativity** (Pg 246-249) **11.4 The Equivalence Between Mass and Energy** (Pg 249) **Exercise** **Multiple Choice Questions (Pg 252):**11.2, 11.3, 11.4, 11.5 **Short Answer Questions (Pg 252):**, 11.2, 11.3, , 11.5, 11.6, 11.7, 11.9, 11.10 **Constructed Response Question (Pg 253):**11.3, 11.4, 11.5 **Comprehensive Questions (Pg 253):**11.1, 11.2, **Numerical Problems (Pg 253):**11.1, 11.2, 11.3, 11.4, 11.5, 11.6,	**11.5 Space time Relativity** **MCQs:** 11.1 **Short answer questions:** 11.1, 11.4, 11.8 **CRQs:** 11.1, 11.2 **Comprehensive Question:** 11.3 **Numerical Problems:** 11.7, 11.8	**90**	**10**

| 12. Nuclear and Particle Physics | **Topics**
12.1 Structure and Properties of the Nucleus (Pg 255)
12.2 Fundamental Forces of Nature (Pg 256–257)
12.3 Matter and Anti-Matter (Pg 257–259)
12.4 Radioactivity (Pg 259-262)
12.5 Fundamental Particles (Pg 262–264)
12.6 Quarks (Pg 264)
12.7 Higgs Boson (Pg 266-)
12.9 The Asymmetry of Matter and Anti-Matter in the Universe (Pg 267)
Exercise
Multiple Choice Questions (Pg 269–270):12.1, , 12.3, 12.6, 12.7, 12.8, 12.10, 12.11, 12.12, 12.13, 12.14, 12.18, 12.19
Short Answer Questions (Pg 271):12.1, 12.4, 12.5, 12.6, 12.8, 12.9, 12.10, 12.12, 12.15
Constructed Response Questions (Pg 271):12.1, 12.3, 12.5
Comprehensive Questions (Pg 272):12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 12.8
Numerical Problems (Pg 272):12.1, 12.2, 12.3, 12.4, 12.5, | 12.8 Conservation laws
12.10 Most of the matter in the observable universe is plasma
12.11The theories about the forces between the masses of particles

12.12 The standard model
MCQs: 12.2, 12.4, 12.5, 12.9, 12.15, 12.16, 12.17
Short answer questions: 12.2, 12.3, 12.7, 12.11, 12.13, 12.14
CRQs: 12.2, 12.4
Numerical Problems: 12.6 | **80** | **20** |

Report

- Some topics and related exercise questions of each chapter delated.
- No change in model paper.
- Numerical solved examples are part of included syllabus expect the mentioned delated examples.

Class: 11th   Subject: Biology

Overall Percentage of the Smart Syllabus (ALP)				
Class 11th Included Percentage = 66.66 %				
Chapters	**Included Syllabus**	**Excluded Syllabus**	**Included Syllabus %**	**Excluded Syllabus %**
1. Biodiversity and Classification	1.1- Three-domain system of classification 1.3 Salient features of kingdoms of domain eukarya 1.4 Classification of kingdom Animalia • MCQ No. 3,4, • Short answers 1-9 • Long Questions no.3,4,5	• How are Archaea unique? pg≠2-3 • 1.2 Taxonomic Hierarchy? pg≠5-7 • Table? pg≠7 • 1.5 Classification of Vertebrates. pg≠19-25 • 1.6 Classification of Viruses. pg≠25-26 • 1.7 Biodiversity. pg≠27-29 • 1.8 Species and Speciation pg≠29-30 • MCQs No.1-2 & 5-10 pg≠30-31 • Long Questions No. 1-2 & 6-11 pg≠32 • Inquisitive questions all pg≠32	51%	49%
2. Bacteria and Viruses	2.1- Structure of bacteria 2.2- Endospore formation in bacteria 2.4- Flagella 2.7- Normal flora 2.8- Virus • MCQ No. 1,2,3,5,7,9,10 • Short answers no.1,2,3,4,5,6,7,8,9,10 • Long questions no. 1,3,4,7,8	• 2.3 Motility in Bacteria pg≠37 • 2.5 Bacteria; Ecology and Diversity pg≠39-41 • 2.6 Importance of Bacteria pg≠41-42 • MCQs No. 4, 6 & 8 pg≠45-46 • Short Questions No. 11-14 pg≠46-47 • Long Questions No. 2, 5 & 6 pg≠47 • Inquisitive Questions (All)	69%	31%
3. Cells and Subcellular Organelles	3.4 Structure Of Cell 3.6 Cell Signaling 3.7 Membrane Transport Mechanisms 3.8 Stem Cells • MCQ No. 1-12 • Short answers No. 3-15 • Long questions No. 1-17	• 3.1 Cells –The Basic Unit of Life pg≠48-49 • 3.2 Cell Theory pg≠49-51 • 3.3 Microscopy pg≠51-54 • Techniques to study the structure of plasma membrane pg≠58-59 • 3.5 Difference between Eukaryotic and Prokaryotic Cells pg≠76-77	76%	24%

Chapter	Included Syllabus	Excluded Syllabus	Included Syllabus %	Excluded Syllabus %
4. Molecular Biology	4.4- Importance Of Water 4.5- Carbohydrates 4.6- Proteins 4.7- Lipids 4.8- Nucleic Acids 4.9- Conjugated Molecules • MCQ No. 1-9 • Short answers No. 2-9 • Long questions No. 3-13	• 4.1 Biological Molecules pg≠92-93 • 4.2 Types of Bonds in Biology pg≠93-94 • 4.3 Condensation (Synthesis) and Hydrolysis pg≠94-95 • Figure 4.38 and side box pg≠118 • Figure 4.43 Only structure of NAD pg≠121 • Short Question No. 1 pg≠125 • Long Questions No. 1, 2 pg≠126 • Inquisitive Questions (All)	85%	15%
5. Enzymes	5.1- Enzymes 5.2- Cofactors And Coenzymes 5.3 Mechanism of Enzyme Action 5.5-Enzyme Inhibition 5.6- Classification Of Enzymes • MCQ No. 1,2,3,4,5,7,8 • Short answers No.1,2,3,4,5,6 • Long questions No.1,2,3,4,9,10,11,12,13	• 5.4 Factors affecting the rate of enzyme action pg≠131-133 • MCQ No. 6 pg≠138 • Short Question No. 7 pg≠139 • Long Questions No. 5-8 pg≠139 • Inquisitive Questions (All)	70%	30%
6. Bioenergetics	6.1 Photosynthesis 6.2 Cellular Respiration • MCQ No. 1,2,3,4,5,6,7,8,9,10 • Short answers No1,2,3,4,5,6,8,9 • Long questions No.2,3,4,5,6,7,8,9,10,11,12	• ATP; The Energy Currency of Cells pg≠141 • Role of Photosynthetic Pigments, Chlorophylls, Accessory Pigments pg≠144-145 • Other Organic Molecules as Fuel for Cellular Respiration pg≠161 • 6.3 Photorespiration pg≠161-164 • Short Questions No. 7 & 10 pg≠165	75%	25%

Chapter	Included Syllabus	Excluded Syllabus	Included Syllabus %	Excluded Syllabus %
		• Long Questions No. 1 & 13-16 pg≠165-166 • Inquisitive Questions (All) pg≠166		
7. Structural and Computational Biology		• Entire unit is deleted along with its all MCQs, Short questions, Long questions and Inquisitive questions	0%	100%

Chapter	Included Syllabus	Excluded Syllabus	Included Syllabus %	Excluded Syllabus %
8. Plant Physiology	8.2- Gas Exchange In Plants 8.5- Transport Of Water In Plants 8.6- Translocation Of Food In Plants 8.7- Growth In Plants 8.8- Osmoregulation In Plants 8.9- Thermoregulation In Plants 8.10- Movements In Plants 8.11- Photoperiodism 8.12- Vernalisation • MCQ No. 1,2,3,4,5,6,7,8,9,11,12 • Short answers No. 4,5,6,7,8,9,10 • Long questions No. 1,2,3,4,5	• 8.1 Nutrition in Plants pg≠177-180 • 8.3 Support in Plants pg≠182-183 • 8.4 Water Potential pg≠183-184 • Plant Growth Regulators pg≠192-194 • MCQ No. 10 pg≠200 • Short Questions No. 1-3 pg≠201 • Inquisitive Questions (All)	64%	36%
9. Human Digestive System	9.1- Anatomy & Physiology Of Digestive System • MCQ No.1,2,3,4,5,6,7,8,9 • Short answers No.4-15 • Long questions No.1,2,3,4,5,6	• Storage and Metabolic Role of the Liver pg≠212 • MCQ No. 10 pg≠213 • Inquisitive Questions (All)	91%	9%

Chapter	Included	Excluded	% Included	% Excluded
10. Human Respiratory System	10.1- Respiratory System Of Man 10.3- Respiratory Pigments • MCQ No.1,2,3,4,5,8,9,10 • Short answers No. 2,3,4,5,7,8 • Long questions No.1,4,5,6,7	• Properties of the Respiratory Surface pg≠216 • 10.2 Transport of Gases pg≠221-223 • Otitis media pg≠226 • MCQs No. 6 & 7 pg≠229 • Short Questions No. 1 & 6 pg≠230 • Long Questions No. 2 & 3 pg≠230 • Inquisitive Questions (All) pg≠230	79%	21%
11. Human Circulatory System	11.1- Structure And Functioning Of Heart 11.3- Blood Pressure 11.5- Lymphatic System Of Human • MCQ No.2,3,4,5,6,7,8,9,10 • Short answers No.2,3,4,6,9 • Long Questions 1,2,3,6,7,8,14	• 11.2 Blood vessels pg≠238-242 • 11.4 Cardiovascular Disorders pg≠246-249 • MCQ No. 1 pg≠252 • Short Questions No. 1, 5, 7, 8 & 10 pg≠253 • Long Questions No. 4, 5 & 9-13 pg≠253-254 • Inquisitive Questions (All) pg≠254	65%	35%
12. Human Skeletal and Muscular Systems	12.1- Bones And Cartilage 12.3- Muscles • MCQ No.1-12 • Short answers No. 1,2,3,4,5,6,7,10,11,12,14,15 • Long questions No.1,2,5,6,7,8,9,10	• Bone Development pg≠257-258 • Box pg≠264 • Both boxes pg≠265 • 12.2 Disorders of Skeletal System pg≠266-270 • Difference between Tetany and Tetanus and • Boxes pg≠277 • Short Questions No. 8, 9 & following two parts of Q. 15 • Rheumatoid arthritis and osteoarthritis • Tetany and tetanus pg≠278-279 • Long Questions No. 3, 4, 11 & 12 pg≠279 • Inquisitive Questions (All) pg≠279	75%	25%
Accumulative %age			**66.66%**	**33.33%**

Note: Percentage is calculated on the basis of number of pages, number of topics and number of questions included and excluded in each chapter.

Class: 11th   Subject: English

Overall Percentage of the Smart Syllabus (ALP)				
Class: 11th	**Included %age = 72**		**Excluded %age = 28**	
Chapter	**Included Syllabus**	**Excluded Syllabus**	**Included Syllabus % (Based on Exercise)**	**Excluded Syllabus % (Based on Exercise)**
10. Khatam-un-Nabiyeen Hazrat Muhammad(PBUH)	Nil	Nil	Nil	Nil
11. Responsibility of the Youth in Nation Building	Nil	Nil	Nil	Nil
12. A Bird Came Down the Walk(Poem)	Nil	Nil	Nil	Nil
13. Team Moon	**Nil**	**Complete Chapter**	0%	100%
14. Impact of Global Warming on Pakistan	Nil	Nil	Nil	Nil
15. The Echoing Green(Poem)	Nil	Nil	Nil	Nil
16. What You Do is You are	**Nil**	**Complete Chapter**	0%	100%
17. Clean Water	Nil	Nil	Nil	Nil
18. Freedom(Poem)	**Nil**	**Complete Chapter**	0%	100%
19. The Punishment of Shahpesh, the Persian, on Khipil, the Builder	Nil	Nil	Nil	Nil
20. Those Winter Sundays(Poem)	Nil	Nil	Nil	Nil
21. The Impact of AI on Society , Human Relationship and Ethics	**Nil**	**Complete Chapter**	0%	100%

| 22. Ruba'iyat (Poem) | Nil | Nil | Nil | Nil |
| 23. The End of the Beginning | Nil | Nil | Nil | Nil |

Chapters	Included %		Excluded %
1	100%	→	0%
2	100%	→	0%
3	100%	→	0%
4	**0%**	→	**100%**
5	100%	→	0%
6	100%	→	0%
7	**0%**	→	**100%**
8	100%	→	0%
9	**0%**	→	**100%**
10	100%	→	0%
11	100%	→	0%
12	**0%**	→	**100%**
13	100%	→	0%
14	100%	→	0%