

## NATIONAL PUBLIC SCHOOL, Kengeri, Bengaluru

## **ENTRANCE EXAMINATION PORTIONS**

## **ACADEMIC YEAR 2024-25**

## FOR GRADE XI (SCIENCE)

SL NO.	CHAPTER	SUB-TOPIC	
SUBJECT : ENGLISH			
1	Comprehension	Unseen Passage	
2	Writing Skills	<ul><li>Descriptive Essay</li><li>Letter to the Editor</li></ul>	
3	Grammar	<ul> <li>Articles</li> <li>Verbs &amp; Tenses</li> <li>Active &amp; Passive Voice</li> <li>Direct &amp; Indirect Speech</li> <li>Transformation of Sentences</li> <li>Editing the text</li> </ul>	
SUBJECT: MATHEMATICS			
1	Algebraic Concepts	Polynomials	
1		Quadratic Equations	
2	Geometric Concepts	Introduction to Trigonometry	
		Circles	
3		Surface Area and Volumes.	
SUBJECT : SCIENCE (PHYSICS)			
1.	Chapter 9	Light Reflection And Refraction	
2.	Chapter 10	Human Eye And Colourful World.	
3.	Chapter 11	Electricity	
SUBJECT : SCIENCE (CHEMISTRY)			
1.	Chemical reactions and equations	Chemical equation, Balanced chemical equation, implications of a balanced chemical equation, types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation, endothermic exothermic reactions, oxidation and reduction.	
2.	Acids, Bases and Salts	Their definitions in terms of furnishing of H+ and OH- ions, General properties, examples and uses, neutralization, concept of pH scale (Definition relating to logarithm not required), importance of pH in everyday life; preparation and uses of Sodium Hydroxide, Bleaching powder, Baking soda, Washing soda and Plaster of Paris.	

3.	Carbon and its compound	Covalent bonding in carbon compounds. Versatile nature of carbon. Homologous series. Nomenclature of carbon compounds containing functional groups (halogens, alcohol, ketones, aldehydes, alkanes and alkynes), difference between saturated hydro carbons and unsaturated hydrocarbons. Chemical properties of carbon compounds (combustion, oxidation, addition and substitution reaction). Ethanol and Ethanoic acid (only properties and uses), soaps and detergents.
SUBJECT : SCIENCE (BIOLOGY)		
1.	Chapter -6	Life processes
2.	Chapter -7	Control and co-ordination.
3.	Chapter - 8	How do organisms reproduce?