

**Class -XII**  
**Subject: Biology**

SL no	CHAPTER	LINKS
	<b>Unit VI: Reproduction</b>	MARK 14
1	Reproduction in Organisms	<a href="https://www.youtube.com/watch?v=uLXz1PLgCGg">https://www.youtube.com/watch?v=uLXz1PLgCGg</a>
2	Sexual Reproduction in Flowering Plants	<a href="https://www.youtube.com/watch?v=6UXGobXdZGA">https://www.youtube.com/watch?v=6UXGobXdZGA</a>
3	Human Reproduction	<a href="https://www.youtube.com/watch?v=Lbv6WbjlQW0">https://www.youtube.com/watch?v=Lbv6WbjlQW0</a>
4	Reproductive Health	<a href="https://www.youtube.com/watch?v=NShd2e6m568">https://www.youtube.com/watch?v=NShd2e6m568</a>
	<b>Unit VII: Genetics and Evolution</b>	MARK 18
5	Principles of Inheritance and Variation	<a href="https://www.youtube.com/watch?v=agUgUIJQ1pk">https://www.youtube.com/watch?v=agUgUIJQ1pk</a>
6	Molecular Basis of Inheritance	<a href="https://www.youtube.com/watch?v=1xXeTccA-_w">https://www.youtube.com/watch?v=1xXeTccA-_w</a> <a href="https://www.youtube.com/watch?v=XNdvpefKaYk">https://www.youtube.com/watch?v=XNdvpefKaYk</a>
7	Evolution	<a href="https://www.youtube.com/watch?v=RTX9si5RBb0">https://www.youtube.com/watch?v=RTX9si5RBb0</a>
	<b>Unit VIII: Biology and Human Welfare</b>	MARK 14
8	Human Health and Diseases	<a href="https://www.youtube.com/watch?v=YA9Kil7gW5Q">https://www.youtube.com/watch?v=YA9Kil7gW5Q</a> <a href="https://youtu.be/AwISyM1L8N4">https://youtu.be/AwISyM1L8N4</a>
9	Strategies for Enhancement in Food Production	<a href="https://www.youtube.com/watch?v=Ha_plbPM_VE">https://www.youtube.com/watch?v=Ha_plbPM_VE</a>
10	Microbes in Human Welfare	<a href="https://www.youtube.com/watch?v=65sh_0kBuM8">https://www.youtube.com/watch?v=65sh_0kBuM8</a>
	<b>Unit IX: Biotechnology and its Application</b>	MARK 10
11	Biotechnology – Principles and Processes	<a href="https://www.youtube.com/watch?v=TQRL9JnYkA4">https://www.youtube.com/watch?v=TQRL9JnYkA4</a>
12	Biotechnology and its Application	<a href="https://www.youtube.com/watch?v=xF7F3kAJmuQ">https://www.youtube.com/watch?v=xF7F3kAJmuQ</a>
	<b>Unit X: Ecology and Environment</b>	MARK 14
13	Organisms and Populations	<a href="https://www.youtube.com/watch?v=L68S1t9XVgE">https://www.youtube.com/watch?v=L68S1t9XVgE</a>
14	Ecosystem	<a href="https://www.youtube.com/watch?v=ZbVkJGrlaJ4">https://www.youtube.com/watch?v=ZbVkJGrlaJ4</a>
15	Biodiversity and its Conservation	<a href="https://www.youtube.com/watch?v=pfPR0siCG0k">https://www.youtube.com/watch?v=pfPR0siCG0k</a>
16	Environmental Issues	<a href="https://www.youtube.com/watch?v=4GiZJiowSRw">https://www.youtube.com/watch?v=4GiZJiowSRw</a>

**Class -XII**  
**Subject: Chemistry**

<b>Unit-1: Solid State</b>	Part-I	<a href="https://www.youtube.com/watch?v=RcG9e2Bg3eE&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=21&amp;t=14s">https://www.youtube.com/watch?v=RcG9e2Bg3eE&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=21&amp;t=14s</a>
	Part-II	<a href="https://www.youtube.com/watch?v=KZDUJulaAWw&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=20&amp;t=714s">https://www.youtube.com/watch?v=KZDUJulaAWw&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=20&amp;t=714s</a>
<b>Unit -2: Solution</b>		<a href="https://www.youtube.com/watch?v=1VEICP7_GFI&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=19&amp;t=3609s">https://www.youtube.com/watch?v=1VEICP7_GFI&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=19&amp;t=3609s</a>
<b>Unit-3: Electrochemistry</b>		<a href="https://www.youtube.com/watch?v=paRg8Q9Y1t8&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=18&amp;t=13s">https://www.youtube.com/watch?v=paRg8Q9Y1t8&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=18&amp;t=13s</a>
<b>Unit-4: Chemical Kinetics</b>		<a href="https://www.youtube.com/watch?v=602063c-qzU&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=17&amp;t=175s">https://www.youtube.com/watch?v=602063c-qzU&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=17&amp;t=175s</a>
<b>Unit -5: Surface Chemistry</b>	Part-I	<a href="https://www.youtube.com/watch?v=2cCiOvm44q4&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=16&amp;t=0s">https://www.youtube.com/watch?v=2cCiOvm44q4&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=16&amp;t=0s</a>
	Part-II	<a href="https://www.youtube.com/watch?v=-YtNNph4qIM&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=15&amp;t=0s">https://www.youtube.com/watch?v=-YtNNph4qIM&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=15&amp;t=0s</a>
<b>Unit -6: General Principles and Process of Isolation of Elements</b>		<a href="https://www.youtube.com/watch?v=QalAQq_-Z14&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=14&amp;t=0s">https://www.youtube.com/watch?v=QalAQq_-Z14&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=14&amp;t=0s</a>
<b>Unit -7: P-Block Elements</b>	Part-I	<a href="https://www.youtube.com/watch?v=kNFXJxX72uY&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=13&amp;t=0s">https://www.youtube.com/watch?v=kNFXJxX72uY&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=13&amp;t=0s</a>
	Part-II	<a href="https://www.youtube.com/watch?v=Xvt11injIA&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=12&amp;t=0s">https://www.youtube.com/watch?v=Xvt11injIA&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=12&amp;t=0s</a>
<b>Unit-8: d &amp; f Block Elements</b>	Part-I	<a href="https://www.youtube.com/watch?v=LzZWHSdYaxw&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=11&amp;t=287s">https://www.youtube.com/watch?v=LzZWHSdYaxw&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=11&amp;t=287s</a>
	Part-II	<a href="https://www.youtube.com/watch?v=w3e0Zpz1iZw&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=10&amp;t=41s">https://www.youtube.com/watch?v=w3e0Zpz1iZw&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=10&amp;t=41s</a>
<b>Unit-9: Coordination Compounds</b>		<a href="https://www.youtube.com/watch?v=53z1EiflKNI&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=9&amp;t=1025s">https://www.youtube.com/watch?v=53z1EiflKNI&amp;list=PLNz32RYOjBerucfu000AYIqZdRU1duNXQ&amp;index=9&amp;t=1025s</a>

**Class -XII**  
**Subject: Physics**

<b>UNITS</b>		<b>WEBLINKS</b>
<b>Unit 1. Electrostatics</b>	Part 1	<a href="https://www.youtube.com/watch?v=5JZjEmJqtus&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=19">https://www.youtube.com/watch?v=5JZjEmJqtus&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=19</a>
	Part 2	<a href="https://www.youtube.com/watch?v=jeLUsBz0XIM&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=18">https://www.youtube.com/watch?v=jeLUsBz0XIM&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=18</a>
	Part 3	<a href="https://www.youtube.com/watch?v=5id9XWSaS4g&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=17">https://www.youtube.com/watch?v=5id9XWSaS4g&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=17</a>
	Part 4	<a href="https://www.youtube.com/watch?v=bAb4Yt0NR7w&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=16">https://www.youtube.com/watch?v=bAb4Yt0NR7w&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=16</a>
<b>Unit 2. Current Electricity</b>		<a href="https://www.youtube.com/watch?v=7V9rjkE5YQ&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=15">https://www.youtube.com/watch?v=7V9rjkE5YQ&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=15</a>
<b>Unit 3. Magnetic Effect of Current and Magnetism</b>	Part 1	<a href="https://www.youtube.com/watch?v=8zKTFwlzXhM&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=14">https://www.youtube.com/watch?v=8zKTFwlzXhM&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=14</a>
	Part 2	<a href="https://www.youtube.com/watch?v=96mflZXJcA&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=13">https://www.youtube.com/watch?v=96mflZXJcA&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=13</a>
<b>Unit 4. Electromagnetic Induction and Alternating Currents</b>	Part 1	<a href="https://www.youtube.com/watch?v=GtjtpSAD-w0&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=12">https://www.youtube.com/watch?v=GtjtpSAD-w0&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=12</a>
	Part 2	<a href="https://www.youtube.com/watch?v=DZv-F_XtJ68&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=11">https://www.youtube.com/watch?v=DZv-F_XtJ68&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=11</a>
<b>Unit 5. Electromagnetic Waves</b>		<a href="https://www.youtube.com/watch?v=p0AwOTqgTTk&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=10">https://www.youtube.com/watch?v=p0AwOTqgTTk&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=10</a>
<b>Unit 6. Optics</b>	Part 1	<a href="https://www.youtube.com/watch?v=ZJcLscYRG4M&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=9">https://www.youtube.com/watch?v=ZJcLscYRG4M&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=9</a>
	Part 2	<a href="https://www.youtube.com/watch?v=hcNrcXxijvo&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=8">https://www.youtube.com/watch?v=hcNrcXxijvo&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=8</a>
	Part 3	<a href="https://www.youtube.com/watch?v=hgyWISROhSA&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=7">https://www.youtube.com/watch?v=hgyWISROhSA&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=7</a>
<b>Unit 7. Dual nature of radiation and Matter</b>		<a href="https://www.youtube.com/watch?v=6snnsNjhD24&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=6">https://www.youtube.com/watch?v=6snnsNjhD24&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=6</a>
<b>Unit 8. Atoms and Nuclei</b>	Part 1	<a href="https://www.youtube.com/watch?v=mBCqyWZ-eXg&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=5">https://www.youtube.com/watch?v=mBCqyWZ-eXg&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=5</a>
	Part 2	<a href="https://www.youtube.com/watch?v=uVecxztTxx0&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=4">https://www.youtube.com/watch?v=uVecxztTxx0&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=4</a>
<b>Unit 9. Electronic Devices</b>	Part 1	<a href="https://www.youtube.com/watch?v=EaP2qHDFJUs&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=3">https://www.youtube.com/watch?v=EaP2qHDFJUs&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=3</a>
	Part 2	<a href="https://www.youtube.com/watch?v=aFdpYFJlqdc&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=2">https://www.youtube.com/watch?v=aFdpYFJlqdc&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=2</a>
<b>Unit 10. Communication Systems</b>		<a href="https://www.youtube.com/watch?v=hMdkfZmu5YY&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=1">https://www.youtube.com/watch?v=hMdkfZmu5YY&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePI&amp;index=1</a>

**Class -XII**  
**Subject: Mathematics**

CHAPTER/MARK	TOPIC COVERED	WEBLINK FOR CONCEPTUAL STUDY
<b>1: RELATION AND FUNCTIONS</b> (5 marks)	1.1 Relation	<a href="https://youtu.be/bzJs4H1ufaw">https://youtu.be/bzJs4H1ufaw</a>
	1.2 Types of relations	
	1.3 TYPES OF FUNCTIONS	
	1.4 COMPOSITION OF FUNCTIONS AND INVERTIBLE FUNCTIONS	
	1.4 BINARY OPERATIONS	
<b>2: INVERSE TRIGONOMETRIC FUNCTIONS</b> (5 marks)	2.1 INTRODUCTION AND BASIC CONCEPTS	<a href="https://youtu.be/tQDCgaAZ-EU">https://youtu.be/tQDCgaAZ-EU</a>
	2.2 PROPERTIES OF INVERSE TRIGONOMETRIC FUNCTIONS	
<b>3: MATRICES</b> (7 marks)	3.1 MATRIX AND TYPES OF MATRICES	<a href="https://youtu.be/ISJbrBrHZn0">https://youtu.be/ISJbrBrHZn0</a>
	3.2 OPERATIONS ON MATRICES	
	3.3 TRANSPOSE OF A MATRIX	
	3.4 SYMMETRIC AND SKEW SYMMETRIC MATRICES	
	3.5 ELEMENTARY TRANSFORMATION OF A MATRIX	
	3.6 INVERTIBLE MATRICES	
<b>4: DETERMINANTS</b> (6 marks)	4.1 DETERMINANT (INTRODUCTION)	<a href="https://youtu.be/BZ1tT7Lod5M">https://youtu.be/BZ1tT7Lod5M</a>
	4.2 PROPERTIES OF DETERMINANTS	
	4.3 AREA OF A TRIANGLE	
	4.4 MINORS AND COFACTORS	
	4.5 ADJOINT AND INVERSE OF A MATRIX	
	4.6 APPLICATION OF DETERMINANTS AND MATRICES	
<b>5: CONTINUITY AND DIFFERENTIABILITY</b> (10 marks)	5.1 CONTINUITY	<a href="https://youtu.be/uahqLcCaiNs">https://youtu.be/uahqLcCaiNs</a>
	5.2 DIFFERENTIABILITY	
	5.3 EXPONENTIAL AND LOGARITHMIC FUNCTIONS	
	5.4 LOGARITHMIC DIFFERENTIATION	
	5.5 DERIVATIVES OF PARAMETRIC FUNCTIONS	
	5.6 SECOND ORDER DERIVATIVE	
	5.7 MEAN VALUE THEOREM	
<b>6: APPLICATION OF DERIVATIVES</b> (8 marks)	6.1 RATE OF CHANGE OF QUANTITIES	<a href="https://youtu.be/gf8WO4gem0Y">https://youtu.be/gf8WO4gem0Y</a>
	6.2 INCREASING AND DECREASING FUNCTIONS	
	6.3 TANGENTS AND NORMAL	
	6.4 APPROXIMATIONS	
	6.5 MAXIMA AND MINIMA	
<b>7: INTEGRALS</b> (14 MARKS)	7.1 INTRODUCTION	<a href="https://youtu.be/IROu1XoGoYQ">https://youtu.be/IROu1XoGoYQ</a>
	7.2 INTEGRATION AS AN INVERSE PROCESS OF DIFFERENTIATION	
	7.3 METHODS OF INTEGRATION	
	7.4 INTEGRALS OF SOME PARTICULAR FUNCTIONS	
	7.5 INTEGRATION BY PARTIAL FRACTION	
	7.6 INTEGRATION BY PARTS	
	7.7 DEFINITE INTEGRALS	
	7.8 FUNDAMENTAL THEOREM OF CALCULUS	

	7.9 EVALUATION OF DEFINITE INTEGRALS BY SUBSTITUTION	
	7.10 SOME PROPERTIES OF DEFINITE INTEGRALS	
<b>8: APPLICATION OF INTEGRALS (4 MARKS)</b>	8.1 INTRODUCTION	<a href="https://youtu.be/TBD_adLmqeg">https://youtu.be/TBD_adLmqeg</a>
	8.2 AREA UNDER SIMPLE CURVES	
	8.3 AREA BETWEEN TWO CURVES	
<b>9: DIFFERENTIAL EQUATIONS (8 MARKS)</b>	9.1 INTRODUCTION	<a href="https://youtu.be/qZ9ssqQ9nwA">https://youtu.be/qZ9ssqQ9nwA</a>
	9.2 GENERAL AND PARTICULAR SOLUTIONS OF A DIFFERENTIAL EQUATION	
	9.3 FORMATION OF A DIFFERENTIAL EQUATION	
	9.4 METHODS OF SOLVING FIRST ORDER, FIRST DEGREE DIFFERENTIAL EQUATION	
<b>10: VECTOR ALGEBRA (8 MARKS)</b>	10.1 INTRODUCTION	<a href="https://youtu.be/xuK4YNtP4oQ">https://youtu.be/xuK4YNtP4oQ</a>
	10.2 TYPES OF VECTORS	
	10.3 ADDITION OF VECTORS	
	10.4 MULTIPLICATION OF A VECTOR BY A SCALAR	
	10.5 PRODUCT OF TWO VECTORS	
<b>11: THREE DIMENSIONAL GEOMETRY (9 MARKS)</b>	11.1 INTRODUCTION	<a href="https://youtu.be/q5BR40ZJ4xM">https://youtu.be/q5BR40ZJ4xM</a>
	11.2 DIRECTION COSINES AND DIRECTION RATIOS OF A LINE	
	11.3 EQUATION OF A LINE IN SPACE	
	11.4 ANGLE BETWEEN TWO LINES	
	11.5 SHORTEST DISTANCE BETWEEN TWO LINES	
	11.6 PLANE	
	11.7 COPLANARITY OF TWO LINES	
	11.8 ANGLE BETWEEN TWO PLANES	
	11.9 DISTANCE OF A POINT FROM A PLANE	
	11.10 ANGLE BETWEEN A LINE AND A PLANE	
<b>12: LINEAR PROGRAMMING (6 MARKS)</b>	12.1 INTRODUCTION	<a href="https://youtu.be/4PBUH9WFELo">https://youtu.be/4PBUH9WFELo</a>
	12.2 LINEAR PROGRAMMING PROBLEM AND ITS MATHEMATICAL FORMULATION	
	12.3 DIFFERENT TYPES OF LINEAR PROGRAMMING PROBLEMS	
<b>13: PROBABILITY (10 MARKS)</b>	13.1 INTRODUCTION	<a href="https://youtu.be/9qQ9wD29z4c">https://youtu.be/9qQ9wD29z4c</a>
	13.2 CONDITIONAL PROBABILITY	
	13.3 MULTIPLICATION THEOREM ON PROBABILITY	
	13.4 INDEPENDENT EVENTS	
	13.5 BAYES' THEOREM	
	13.6 RANDOM VARIABLE AND ITS PROBABILITY DISTRIBUTION	
	13.7 BERNOULLI TRIALS AND BINOMIAL DISTRIBUTION	

**Note: For complete textual solutions please download the App from the Link:**  
[https://play.google.com/store/apps/details?id=com.studentzoneapps.mathsncertclass\\_12](https://play.google.com/store/apps/details?id=com.studentzoneapps.mathsncertclass_12)