

**CLASS - X**



**Class X – Telugu (First Language)**

క్ర. సం.	సిలబస్ ప్రకారం మొత్తం పాఠాలు	కృత్యాలు / ప్రాజెక్టుల ఆధారిత పాఠాలు	రిమార్కులు
1.	పాఠాలు : దానశీలము	పాఠాలు : 4. కొత్తబాట	<p>◆ 4, 5 మరియు 11 పాఠాలను బోధించకున్నా కానీ ఆ పాఠాలలో ఇచ్చిన వ్యాకరణాంశాలను పిల్లలకు బోధించాలి.</p> <p>◆ ఈ పాఠ్యాంశాలలోని వ్యాకరణాంశాలను కూడా పబ్లిక్ పరీక్షలో పరీక్షిస్తారు.</p>
2.	ఎవరి భాష వాళ్ళకు వినసొంపు	5. నగరగీతం	
3.	వీర తెలంగాణ	11. భిక్ష	
4.	కొత్తబాట		
5.	నగరగీతం		
6.	భాగ్యోదయం		
7.	శతక మధురిమ		
8.	లక్ష్మసిద్ధి		
9.	జీవనభాష్యం		
10.	గోలకొండపట్టణము		
11.	భిక్ష		
12.	భూమిక		
	ఉపవాచకం : రామాయణం		

**Class X – Telugu – For Other Media (Second Language)**

క్ర. సం.	సిలబస్ ప్రకారం మొత్తం పాఠాలు	కృత్యాలు / ప్రాజెక్టుల ఆధారిత పాఠాలు	రిమార్కులు
	<p>పాఠాలు :</p> <ol style="list-style-type: none"> <li>1. భాగవతరత్నాలు</li> <li>2. పరిష్కారం</li> <li>3. వర్షాలు</li> <li>4. బకాసురిడి విందు</li> <li>5. శతకసుధ</li> <li>6. మాట్లాడే నాగలి</li> <li>7. శుభోదయం</li> <li>8. షెహనాయ్ షెహన్షా</li> </ol> <p>ఉపవాచకం :</p> <ol style="list-style-type: none"> <li>1. పి.వి.నరసింహారావు</li> <li>2. మఖ్దూం మొహియుద్దీన్</li> <li>3. అరిగె రామస్వామి</li> <li>4. డా॥ కొత్తపల్లి జయశంకర్</li> </ol>	<p>పాఠాలు :</p> <ol style="list-style-type: none"> <li>4. బకాసురిడి విందు</li> <li>6. మాట్లాడే నాగలి</li> </ol>	<ul style="list-style-type: none"> <li>◆ 4 మరియు 6 పాఠాలను బోధించకున్నా కానీ ఆ పాఠాలలో ఇచ్చిన వ్యాకరణాంశాలను పిల్లలకు బోధించాలి.</li> <li>◆ ఈ పాఠ్యాంశాలలోని వ్యాకరణాంశాలను కూడా పబ్లిక్ పరీక్షలో పరీక్షిస్తారు.</li> </ul>

**Class X – Urdu (First Language)**

کیفیات	مشغلے/منصوبہ کام پر مبنی اسباق	نصاب کے مطابق جملہ اسباق
<p>◀ مشغلے/منصوبہ کام پر مبنی اسباق کی تدریس نہ کئے جانے کے باوجود ان اسباق میں شامل قواعد سے بچوں کو ضرور واقف کروایا جائے۔</p> <p>◀ ان اسباق میں شامل قواعد سے متعلق سوالات جانچ میں پوچھے جائیں گے۔</p>	<p><b>اسباق:</b></p> <p>3. قصیدہ</p> <p>5. ایلیسیج</p> <p>11. غزل</p> <p>12۔ جانور انسان سے ناراض ہیں</p>	<p><b>اسباق:</b></p> <p>1. نعت</p> <p>2. شہروں میں چاند کو کوئی ماما نہیں کہتا</p> <p>3. قصیدہ</p> <p>4. قلی قلب شاہ کاسفر نامہ</p> <p>5. ایلیسیج</p> <p>6. وطن کی خدمت کے ڈھنگ</p> <p>7. غزل</p> <p>8. دوسرا موسم</p> <p>9. عورت</p> <p>10. غیب</p> <p>11. غزل</p> <p>12 جانور انسان سے ناراض ہیں</p> <p>13 خون کارنگ</p> <p>14. کوہنی چند نارنگ سے انزو یو</p> <p><b>سرسری مطالعہ</b></p> <p>1. درہستیم (سیرت النبی ﷺ)</p>

**Class X – Urdu (Second Language)**

کیفیات	مشغلے/منصوب کام پر مبنی اسباق	نصاب کے مطابق جملہ اسباق
<p>◀ مشغلے/منصوب کام پر مبنی اسباق کی تدریس نہ کئے جانے کے باوجود ان اسباق میں شامل قواعد سے بچوں کو ضرورتاً وقت کر دیا جائے۔</p> <p>◀ ان اسباق میں شامل قواعد سے متعلق سوالات جانچ میں پوچھے جائیں گے۔</p> <p>◀ اسباق کی تدریس کے لیے ایام کار کو مدنظر رکھ کر پیریوڈ منتقل کئے جائیں۔</p>	<p align="center"><b>اسباق</b></p> <p>.6 حاضر جواب جوتا</p> <p>.7 غزل</p> <p>.8 وہی</p>	<p align="center"><b>اسباق</b></p> <p>.1 حمد</p> <p>.2 احسان کا بدلہ</p> <p>.3 گنگا</p> <p>.4 پھیل کا خط پہلو کے نام</p> <p>.5 تعلیم نسواں</p> <p>.6 حاضر جواب جوتا</p> <p>.7 غزل</p> <p>.8 وہی</p> <p align="center"><b>سری مطالعہ</b></p> <p>.1 حضرت ابو بکر صدیقؓ</p> <p>.2 حضرت عمر فاروقؓ</p> <p>.3 حضرت عثمان غنیؓ</p> <p>.4 حضرت علیؓ</p>

**Class X – Hindi (First Language)**

क्र.सं.	पाठ्यांश विवरण के अनुसार विषय सूची	क्रियाकलाप / परियोजना आधारित पाठ	टिप्पणी
1.	पाठ :- सुंदर भारत	पाठ :- 5. गोभी का फूल	♦ क्रियाकलाप / परियोजना आधारित पाठों में निहित व्याकरणांशों (भाषा की बात) का ज्ञान बच्चों को करवाना चाहिए।
2.	नेताजी का चश्मा	9. बाल अदालत	
3.	एक कहानी यह भी		
4.	कवित्त	उपवाचक :- (Non-detail)	
5.	गोभी का फूल	5. गजनंदनलाल पहाड़ चढ़े	
6.	राम-लक्ष्मण-परशुराम संवाद		
7.	अन्वेषण		
8.	बच्चों से न छीने उनका हक		
9.	बाल अदालत		
10.	कन्यादान		
11.	बाट की पहचान		
12.	सफलता की चुनौतियाँ		
1.	उपवाचक :- (Non-detail) मंगल, मानव और मशीन		
2.	बड़े भाई साहब		
3.	गुड़ियों का त्यौहार		
4.	साथे		
5.	गजनंदनलाल पहाड़ चढ़े		

**Class X – Hindi (Second Language)**

क्र.सं.	पाठ्यांश विवरण के अनुसार विषय सूची	क्रियाकलाप / परियोजना आधारित पाठ	टिप्पणी
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	<p>पाठ :-</p> <p>बरसते बादल ईदगाह माँ मुझे आने दे! कण-कण का अधिकारी लोकगीत अंतर्राष्ट्रीय स्तर पर हिंदी भक्ति पद स्वराज्य की नींव दक्षिणी गंगा गोदावरी नीति दोहे जल ही जीवन है धरती के सवाल अंतरिक्ष के जवाब</p>	<p>पाठ :-</p> <p>9. दक्षिणी गंगा गोदावरी 11. जल ही जीवन है</p>	<p>◆ क्रियाकलाप / परियोजना आधारित पाठों में निहित व्याकरणांशों (भाषा की बात) का ज्ञान बच्चों को करवाना चाहिए।</p>
	<p>उपवाचक :- (Non-detail)</p> <p>3. अपने स्कूल को एक उपहार</p>		
1. 2. 3. 4.	<p>उपवाचक :- (Non-detail)</p> <p>1. शांति की राह में 2. हम सब एक हैं 3. अपने स्कूल को एक उपहार 4. अनोखा उपाय</p>		

**Class X – Sanskrit (Oriental Course)**

క్ర. సం.	సిలబస్ ప్రకారం మొత్తం పాఠాలు	కృత్యాలు / ప్రాజెక్టుల ఆధారిత పాఠాలు	రిమార్కులు
	<p align="center"><b>పద్యభాగ:</b></p> <p><b>ప్రథమ: భాగ:</b></p> <p>౧. ధ్యేయపథిక సాధక !</p> <p>౨. శ్లోకరత్నాని</p> <p>౩. మేఘసందేశ:</p> <p><b>ద్వితీయ: భాగ:</b></p> <p>౪. పరమో ధర్మ:</p> <p>౫. ద్రౌపదీపరిదేవనా</p> <p>౬. మన్దాకినీ</p> <p><b>తృతీయ: భాగ:</b></p> <p>౭. భక్తిరేవ గరీయసీ</p> <p>౮. చాణక్యనీతి:</p> <p>౯. అష్టావక్ర:</p> <p>౧౦. అవతారికా</p> <p align="center"><b>గద్యభాగ:</b></p> <p><b>ప్రథమ: భాగ:</b></p> <p>౧. హిరణ్యకశ్యపవృత్తాంత:</p> <p>౨. దేశభూషా హి భారతీ</p> <p>౩. శాకుంతలాయా:-పతిగృహప్రస్థానమ్</p> <p><b>ద్వితీయ: భాగ:</b></p> <p>౪. అణుశాస్త్రజ్ఞ: - కణాదమహర్షి:</p> <p>౫. చంద్రాపీఠస్య - విద్యాభ్యాస:</p> <p>౬. కిం జలమ్ ఉత్తమమ్?</p> <p><b>తృతీయ: భాగ:</b></p> <p>౭. శఠం ప్రతి శాఠ్యమ్</p> <p>౮. భిషజోభిషజ్యమ్</p> <p>౯. ప్రతిభాసమ్మాన:</p> <p>౧౦. నాలన్దావైభవమ్</p>	<p align="center"><b>పద్యభాగ:</b></p> <p>౮. చాణక్యనీతి:</p> <p>౧౦. అవతారికా</p> <p align="center"><b>గద్యభాగ:</b></p> <p>౨. దేశభూషా హి భారతీ</p> <p>౩. శాకుంతలాయా:-పతిగృహప్రస్థానమ్</p> <p>౯. ప్రతిభాసమ్మాన:</p>	<p>◆ పద్య భాగం 8 మరియు 10 పాఠాలను బోధించుకున్నా కానీ ఆ పాఠాలలో ఇచ్చిన వ్యాకరణాంశాలను పిల్లలకు బోధించాలి.</p> <p>◆ గద్య భాగం 2, 3 మరియు 9 పాఠాలను బోధించుకున్నా కానీ ఆ పాఠాలలో ఇచ్చిన వ్యాకరణాంశాలను పిల్లలకు బోధించాలి.</p> <p>◆ ఈ పాఠ్యాంశాలలోని వ్యాకరణాంశాలను కూడా పబ్లిక్ పరీక్షలో పరీక్షిస్తారు.</p>

**Class X – Sanskrit (Composite Course)**

క్ర. సం.	సిలబస్ ప్రకారం మొత్తం పాఠాలు	కృత్యాలు / ప్రాజెక్టుల ఆధారిత పాఠాలు	రిమార్కులు
9.	<p><b>ప్రథమ: భాగ:</b></p> <p>1. लोकहितं मम करणीयम्</p> <p>2. परोपकाराय सतां विभूतयः</p> <p><b>द्वितीय: भाग:</b></p> <p>3. स्वावलम्बनम्</p> <p>4. वयं शिक्षेम तिर्यग्भ्यः</p> <p><b>तृतीय: भाग:</b></p> <p>5. वृद्धोपदेशः</p> <p>6. विवेकध्वनिः</p> <p>7. आवेदनम्</p>	<p>3. स्वावलम्बनम्</p> <p>7. आवेदनम्</p>	<p>◆ 3 మరియు 7 పాఠాలను బోధించుకున్నా కానీ ఆ పాఠాలలో ఇచ్చిన వ్యాకరణాంశాలను పిల్లలకు బోధించాలి.</p> <p>◆ ఈ పాఠ్యాంశాలలోని వ్యాకరణాంశాలను కూడా పబ్లిక్ పరీక్షలో పరీక్షిస్తారు.</p>

## Class X – Arabic (Composite Course)

کیفیات	مشغلے/منصوبہ کام پر مبنی اسباق	نصاب کے مطابق جملہ اسباق
تمام اسباق کی تدریس لازمی ہے۔	--	<b>اسباق</b> 1. أَدَبُ الْأَكْلِ وَالشُّرْبِ 2. حَدِيثَةُ الْحَيَوَانَاتِ 3. مَدْرَسَتِي 4. كَيْفَ أَقْضِي يَوْمِي 5. الْكِتَابُ

## Class X – Kannada

S. No.	Lessons as per syllabus	Activity/ project based lessons	Remarks
1	Yuddha	3. Landon Nagar	
2	Shabari	6. Vyaghra Geete	
3	Landon Nagar	9. Saikalpa Geete	
4	Bhagya Shilpigulu (Nalvadi Krishnaraj Vadeyaru, Sir. M. Vishwarayya)	20. Mruga Mattu Sundari	
5	Edegebidda Akshara	21. Vagatugalu	
6	Vyaghra Geete		
7	Vruksha Sakshi		
8	Sukumar Swamiya Kate		
9	Saikalpa Geete		
10	Hakki Harutide Nodiduru		
11	Halagali Bedaru		
12	Kouravadran Konde Neenu		
13	Hasuru		
14	Chhalamane Merevem		
15	Veeralav		
16	Kemmane Meesevottamane		
17	Swamy Vivekandara Chintanegalu		
18	Vasantamukh Taralilla		
19	Bhagar Singh		
20	Mruga Mattu Sundari		
21	Vagatugalu		

**Class X – Marathi**

<b>Unit No.</b>	<b>Lessons as per syllabus</b>	<b>Activity / project based lessons</b>	<b>Remarks</b>
1	Jai jai he bharat desha (geet)	3. Aajj; Kutumbache Agala	
2	Bolatho Marathi	5. Vasant Hruday Chitra	
3	Aajj; Kutumbache Agala	6. Vastu (Kavita)	
4	Uttam lakshan	8. Vat Pahatanna	
5	Vasant Hruday Chitra (sthulavachan)	15. Khod Ankhi Thodese	
6	Vastu (Kavita)	16. Aakashi Zep Ghare	
7	Gavathache Pate	17. Sonali	
8	Vat Pahatanna		
9	Ashwasak Chitra (Kavita)		
10	Appanche Patra (sthulavachan)		
11	Goshta Arunimachi		
12	Bharat Vakya (Kavita)		
13	Karte Sudharak Karve		
14	Kale kes		
15	Khod Ankhi Thodese		
16	Aakashi Zep Ghare		
17	Sonali		
18	Nirnay		
19	Tu Jhalas Muk Samajacha Nayak (Kavita)		
20	Sarva Vishwachi Vhave Sukhi (sthulavachan)		

## Class X – Tamil

S. No.	Theme	Lessons as per syllabus	Activity/ project based lessons	Remarks
1	Mozhi	Annai Mozhiye		
		Thamizhchol Valam		
	Amudha Ootru	Irattura Mozhidhal		
		Urainadayin Aninalangal		
Ezhuththu, Sol				
2	Iyarkai, Sutruchoozhal	Ketkiradha EnKural!		
		Katre vaa!		
	Uyirin Osai	Mullaip Paattu		
		Puyalile Oru Thoni		
Thogainilaith Thodargal				
3	Panbaadu	Virundhu Potrudhum!		
		Kaasikkaandam		
		Malaipadukadaam		
	Koottaanjoru	Gopallapuraththu Makkal		
		Thogaanilaith Thodargal		
		Thirukkural		
4	Ariviyal, Thozhilnutpam	Seyarkai Nunnarivu	Seyarkai Nunnarivu	
		Perumal Thirumozhi	Perumal Thirumozhi	
	Naangam Thamizh	Paripaadal	Paripaadal	
		Vinnai Thandiya Thannambikkai	Vinnai Thandiya Thannambikkai	
		Ilakkanam – Podhu		
5	Kalvi	MozhiPeyarpuk Kalvi		
		Needhi Venbha		
		Thiruvilayadar Puraanam		
	Manarkeni	Puthiya Nambikkai		
		Vinaa, Vidai Vagaigal, PorulKol		
6	Kalai, Azhagiyal, Puthumaigal	Nighazhkalai	Nighazhkalai	
		Pooththoduththal	Pooththoduththal	
		Muthukkumaraswamy Pillaiththamizh	Muthukkumaraswamy Pillaiththamizh	
	Nilaa Mutram	Kambaraamaayanam	Kambaraamaayanam	
		Paaichchal	Paaichchal	
		Agapporul Ilakkanam		
		Thirukkural		

S. No.	Theme	Lessons as per syllabus	Activity/ project based lessons	Remarks
7	Naagarigam, Naadu, Samugam	Sitragal Oli (Than Varalaaru)		
		Yer Puthitha?		
		Meikkeerthi		
		Silappadhigaaram		
	VidhaiNel	Mangayaraai Pirappadharke..... Purapporul Ilakkanam		
8	Aram, Thaththuvam, Sinthanai	Sanga Ilakkiyaththil Aram		
		Gnanam		
		Kaalakkanitham		
	Peruvazhi	Raamaanujar (Naadagam) Paa – Vagai, Alagidudhal		
9	Manidham, Aalumai	JayaGandham (Ninaivu Idhazh)	JayaGandham (Ninaivu Idhazh)	
		Siththalu	Siththalu	
		Thembhaavani	Thembhaavani	
	Anbin Mozhi	Oruvan Irukkiran	Oruvan Irukkiran	
		Ani		
		Thirukkural	Thirukkural	

## Class X – English

Unit. No.	Theme and Lessons as per syllabus	Activity / project based lessons	Remarks
1	Personality Development A) Attitude is Altitude B) Every Success Story is also a Story of Great Failures C) I will Do It		
2	Wit and Humour A) The Dear Departed I B) The Dear Departed II C) The Brave Potter	Wit and Humour A) The Dear Departed 1 B) The Dear Departed 2 C) The Brave Potter	
3	Human Relations A) The Journey B) Another Woman C) The Never Never Nest		
4	Films and Theatre A) Rendezvous with Ray B) Maya Bazaar C) A Tribute	Films and Theatre A) Rendezvous with Ray B) Maya Bazaar C) A Tribute	
5	Social Issues A) The Storeyed House 1 B) The Storeyed House 2 C) Abandoned		
6	Biodiversity A) Environment B) Or Will the Dreamer Wake		
7	Nation and Diversity A) My Childhood B) A Plea for India C) Unity in Diversity		
8	Human Rights A) Jamaican Fragment B) Once Upon a Time C) What is My Name?		

## Class X – Mathematics

Sl. No.	Name of the chapter	Topics in the syllabus	Activity / project based lessons
1	Real Numbers	1) Division Algorithm 2) Euclid's Algorithm 3) Fundamental Theorem of Arithmetic 4) Rational Numbers And Their Decimal Expansions 5) Irrational Numbers 6) Logarithms	-
2	Sets	1) Roster Form and Set Builder Form 2) Empty set, Universal set and subset 3) Basic operations on sets 4) Venn diagrams 5) Equal sets 6) Finite & infinite sets, cardinality of a finite set	-
3	Polynomials	1) Degree, zero, value of a polynomial 2) Graphical representation of a quadratic polynomial 3) Relationship between zeroes and coefficients of a polynomial 4) Division Algorithm for polynomials	1) Division Algorithm for polynomials

Sl. No.	Name of the chapter	Topics in the syllabus	Activity / project based lessons
4	Linear Equations in two variables	1) Graphical Method 2) Relationship between coefficients and nature of equations 3) Substitution method 4) Elimination method 5) Equations reducible to linear equations	1) Equations reducible to linear equations
5	Quadratic Equations	1) Quadratic equation 2) Solution by Factorization 3) Solution by completing the square 4) Nature of roots	1) Situational problems based on equations reducible to Quadratic Equations 2) Solution by completing the square
6	Progressions	1) What is an arithmetic progression? 2) $n^{\text{th}}$ term of AP 3) Sum of 'n' terms of AP 4) What is GP? $n^{\text{th}}$ term of GP	1) Applications in solving daily life problems based on sum to 'n' terms 2) What is GP? $n^{\text{th}}$ term of GP
7	Co-ordinate Geometry	1) Distance between two points 2) Section Formula- Points of trisection, centroid 3) Area of triangle 4) Slope of a line	1) Area of triangle and Area of triangle using Heron's formula

Sl. No.	Name of the chapter	Topics in the syllabus	Activity / project based lessons
8	Similar Triangles	1) Similar Triangles 2) Basic Proportionality theorem and converse 3) Criteria for Similarity of triangles 4) Area of Similar Triangles 5) Pythagoras Theorem & Converse of Pythagoras Theorem	1) Area of Similar Triangles 2) Converse of Pythagoras Theorem 3) Construction of Similar Triangle with improper and Mixed Fractions
9	Tangents and Secants to Circles	1) Tangents of a circle 2) Finding Length of a Tangent 3) Number of Tangents to a circle 4) Area of Segment of a Circle (Minor & Major Segments)	1) Area of Segment of a Circle (Minor & Major Segments)
10	Mensuration	1) Surface Area and Volume of Solid Figures 2) Surface Area of Combination of Solids 3) Volume of Combination of Solids 4) Conversion of Solids from one shape to the another	1) Conversion of Solids from one shape to the another
11	Trigonometry	1) Trigonometric Ratios 2) Values of Trigonometric Ratios for specific Angles 3) Trigonometric Ratios of Complementary Angles 4) Trigonometric Identities	1) Motivate the ratios defined at $0^{\circ}$ and $90^{\circ}$ 2) Trigonometric Ratios of Complementary Angles
12	Applications of Trigonometry	1) Problems with one triangle 2) Problems with two triangles	1) Complementary problems are not to be given
13	Probability	1) Probability-Mutually Exclusive Events 2) Complementary Events and probability 3) Deck of Cards and probability 4) Applications of probability	-

Sl. No.	Name of the chapter	Topics in the syllabus	Activity / project based lessons
14	Statistics	1) Mean – Direct Method - Assumed mean method - Step deviation Method 2) Median 3) Mode 4) Graph of Ogive Curves(less than type and more than type)	1) Mean by Step deviation Method 2) Graph of Ogive Curve (more than type)

## Class X – Physical Science

Sl. No	Name of the chapter	Topics in the syllabus	Activity / project based lessons
1	REFLECTION OF LIGHT AT CURVED SURFACES	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Normal to the curved surface</li> <li>• Spherical mirrors</li> <li>• Convex</li> <li>• concave mirrors</li> <li>• Pole</li> <li>• Focus</li> <li>• Centre of curvature</li> <li>• principle axis</li> <li>• Radius of curvature</li> <li>• Focal length</li> <li>• Images formed by spherical mirrors</li> <li>• Ray diagrams for spherical mirrors</li> <li>• Formula for spherical mirrors – sign convention</li> <li>• Application of reflection - Solar Cooker</li> </ul>	-
2	CHEMICAL EQUATIONS	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Some daily life examples of chemical reactions</li> <li>• Chemical equations – writing chemical equations</li> <li>• skeletal chemical equations</li> <li>• balancing chemical equations</li> <li>• Writing symbols of physical states</li> <li>• Heat changes</li> <li>• gas evolved and precipitate formed</li> <li>• Interpreting a balanced chemical equation.</li> </ul>	-
3	ACIDS, BASES AND SALTS	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Chemical properties of acids &amp; bases</li> <li>• what do acids have in common?</li> <li>• What do bases have in common?</li> <li>• Do Acids produce Ions only in Aqueous Solution?</li> <li>• Reaction of Acid, Base with water</li> <li>• Strength of Acid or Base - <math>p^H</math> scale</li> <li>• Importance of <math>p^H</math> in everyday life, Salts</li> <li>• Chemicals from common salt.</li> </ul>	-
4	REFRACTION OF LIGHT AT CURVED SURFACES	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Refraction of light at curved surface</li> <li>• Lenses, Image formation</li> <li>• Rules for Ray diagram</li> </ul>	-

Sl. No	Name of the chapter	Topics in the syllabus	Activity / project based lessons
		<ul style="list-style-type: none"> <li>• Images formed by the lenses</li> <li>• Formula derived for thin lenses</li> <li>• Focal length of lens depends on surrounding medium</li> <li>• Behaviour of certain light ray when they are incident on a lense</li> <li>• Rules to draw the ray diagram for image formation by lense</li> <li>• Magnification</li> <li>• Lens maker formula.</li> </ul>	
5	HUMAN EYE AND COLOURFUL WORLD	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Least distance of distinct vision</li> <li>• Structure of human Eye</li> <li>• Myopia</li> <li>• Hypermetropia</li> <li>• Presbyopia</li> <li>• Dispersion and scattering of light</li> <li>• Prism</li> <li>• Dispersion of light</li> <li>• Scattering of light</li> </ul>	Prism, Dispersion of light, Scattering of light.
6	STRUCTURE OF ATOM	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Spectrum, Electromagnetic Spectrum</li> <li>• Bohr's model of Hydrogen atom and its limitations, Quantum Numbers</li> <li>• Quantum mechanical model of an Atom</li> <li>• Electronic Configuration of elements in their atoms</li> <li>• Aufbau Principal</li> <li>• Paulis principal</li> <li>• Hund's Rule of maximum multiplicity</li> </ul>	-
7	CLASSIFICATION OF ELEMENTS – THE PERIODIC TABLE	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Need for arrangement of elements in an organized manner</li> <li>• Doberieners Triads –Limitations, Newland's law of Octaves</li> <li>• Mendeleev's Periodic Table (Periodic law, Achievements &amp; Limitations)</li> <li>• Modern Periodic Table</li> <li>• Properties of element and their trends in groups and periods.</li> </ul>	-
8	CHEMICAL BONDING	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Lewis symbol, Lewis dot structure</li> <li>• Electronic theory of Valence by Lewis and Kossel</li> <li>• Ionic and Covalent bonds:</li> </ul>	<b>Total chapter</b>

Sl. No	Name of the chapter	Topics in the syllabus	Activity / project based lessons
		<ul style="list-style-type: none"> <li>➤ Ionic bond – formation Ionic bond, cation formation, anion formation</li> <li>• The arrangement of Ions in Ion compounds</li> <li>➤ Covalent bond – shapes</li> <li>• bond lengths and bond energies of Covalent bonds</li> <li>• Draw backs of electronic theory of valance</li> <li>• Valence bond</li> <li>• VESPRT Theory</li> <li>• Valence bond theory – Hybridization</li> <li>• Molecules</li> <li>• Properties of Ionic and Covalent Compounds.</li> </ul>	
9	ELECTRIC CURRENT	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Electric current, Potential difference</li> <li>• How a battery or a cell works</li> <li>• Ohms law and its limitations</li> <li>• resistance, specific resistance</li> <li>• factors influencing resistance</li> <li>• electric shock</li> <li>• Electric Circuits, Kirchhoff's laws</li> <li>• Electric power</li> <li>• Safety fuses</li> </ul>	-
10	ELECTROMAGNETISM	<ul style="list-style-type: none"> <li>• Introduction, Dersted Experiment</li> <li>• Magnetic field</li> <li>• Lines of Magnetic field</li> <li>• Magnetic flux - Magnetic flux density</li> <li>• Magnetic field due to currents</li> <li>• Magnetic force on moving charge and current carrying wire</li> <li>• Electric motor</li> <li>• Electromagnetic induction <ul style="list-style-type: none"> <li>➤ Faraday's law</li> <li>➤ Lenz law</li> </ul> </li> <li>• Electric generator and alternating – Direct Currents.</li> </ul>	<b>Total chapter</b>
11	PRINCIPLES OF METALLURGY	<ul style="list-style-type: none"> <li>• Occurrence of Metals in nature</li> <li>• Extractions of metals from the Ores – activity series and related metallurgy</li> <li>• flow chart of steps involved in the extraction of metals from ore, extraction of crude metals from the ore</li> </ul>	-

Sl. No	Name of the chapter	Topics in the syllabus	Activity / project based lessons
		<ul style="list-style-type: none"> <li>• Corrosion – Prevention of Corrosion</li> <li>• Important Processes used in metallurgy, Flux, Furnace.</li> </ul>	
12	CARBON AND ITS COMPOUNDS	<ul style="list-style-type: none"> <li>• Introduction, Carbon</li> <li>• Promotion of an Electron</li> <li>• Hybridization</li> <li>• Allotropes of Carbon</li> <li>• Versatile nature of carbon</li> <li>• Hydrocarbons</li> <li>• Bonding of carbon with other elements</li> <li>• Functional groups in carbon compounds</li> <li>• Isomerism</li> <li>• Homologous series</li> <li>• Nomenclature of Carbon compounds</li> <li>• Chemical properties of carbon compounds</li> <li>• Important carbon compounds</li> <li>• Esterification reactions</li> <li>• Soaps               <ul style="list-style-type: none"> <li>➤ Saponification reaction</li> <li>➤ Micelles- formation of Micelles</li> </ul> </li> </ul>	<b>Total chapter</b>

## Class X – Biological Science

Sl. No.	Name of the chapter	Topics in the syllabus	Activity / project based lessons
1	Nutrition	<ul style="list-style-type: none"> <li>• Autotrophic Nutrition</li> <li>• Water and Photosynthesis</li> <li>• Air and Photosynthesis</li> <li>• Light and Photosynthesis</li> <li>• Chlorophyll and Photosynthesis</li> <li>• Where does Photosynthesis take place?</li> <li>• Mechanism of Photosynthesis</li> <li>• Nutrition in Human Beings</li> <li>• Flow chart of human digestive system</li> <li>• Health aspects of the alimentary canal</li> <li>• Diseases due to malnutrition</li> <li>• Vitamin deficiency diseases</li> </ul>	-
2	Respiration	<ul style="list-style-type: none"> <li>• Discovery of gases and respiration</li> <li>• Steps in Respiration</li> <li>• Breathing</li> <li>• Pathway of air</li> <li>• Epiglottis and passage of air</li> <li>• Mechanism of respiration in human beings</li> <li>• Gaseous Exchange (alveoli to capillaries)</li> <li>• Transportation of gases</li> <li>• Gaseous exchange (capillaries to cells and back)</li> <li>• Cellular respiration</li> <li>• Anaerobic respiration</li> <li>• Fermentation</li> <li>• Respiration versus combustion</li> <li>• Evolution in gases exchanging system</li> <li>• Respiration in plants</li> <li>• Photosynthesis versus Respiration</li> </ul>	-
3	Transportation	<ul style="list-style-type: none"> <li>• Introduction – Need of the transport system in all living beings</li> <li>• Internal structure of the heart</li> <li>• Blood vessels and circulation</li> <li>• The cardiac cycle</li> </ul>	-

Sl. No.	Name of the chapter	Topics in the syllabus	Activity / project based lessons
		<ul style="list-style-type: none"> <li>• Single and double circulation</li> <li>• Lymphatic system</li> <li>• Blood Pressure (B.P.)</li> <li>• Coagulation of blood</li> <li>• How is water absorbed?</li> <li>• The mechanism of water movement in plants</li> <li>• Transport of mineral salts</li> <li>• Transport of materials in plants</li> </ul>	
4	Excretion	<ul style="list-style-type: none"> <li>• Introduction – Need of excretion</li> <li>• Excretion in Human Beings</li> <li>• Excretory System in Human being               <ol style="list-style-type: none"> <li>1. Kidneys Mechanism of urine formation</li> <li>2. Ureters</li> <li>3. Urinary bladder</li> </ol> </li> <li>• Micturition</li> <li>• Composition of urine</li> <li>• Dialysis Machine (Artificial kidney)</li> <li>• Kidney transplantation</li> <li>• Other pathways of excretion (accessory excretory organs)</li> <li>• Excretion in other organisms</li> <li>• Excretion and release of substances in plants</li> <li>• Excretion Vs Secretion</li> </ul>	-
5	Coordination	<ul style="list-style-type: none"> <li>• Introduction – Need for control and coordination</li> <li>• Responding to stimuli</li> <li>• Integrating pathways - nervous coordination</li> <li>• Structure of nerve cell</li> <li>• Central Nervous System (CNS)</li> <li>• Peripheral Nervous System</li> <li>• Autonomous Nervous System</li> <li>• Coordination without nerves</li> <li>• Other chemical coordinators</li> <li>• Control mechanisms in plants</li> <li>• Tropic and nastic movements in plants</li> </ul>	-
6	Reproduction	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Asexual mode of reproduction</li> <li>• Parthenogenesis</li> </ul>	-

Sl. No.	Name of the chapter	Topics in the syllabus	Activity / project based lessons
		<ul style="list-style-type: none"> <li>• Parthenocarpy</li> <li>• Vegetative propagation</li> <li>• Sexual reproduction</li> <li>• Reproduction in placental mammals - Human beings</li> <li>• Male reproductive system</li> <li>• Female reproductive system</li> <li>• Child birth</li> <li>• Sexual reproduction in flowering plants</li> <li>• Cell division and continuation of life</li> <li>• Cell division in Human beings</li> <li>• Cell cycle</li> <li>• Reproductive health</li> <li>• Birth control methods</li> <li>• Fighting against social ills</li> </ul>	
7	Coordination in life processes	<ul style="list-style-type: none"> <li>• Introduction – Recall life processes</li> <li>• Feeling hungry</li> <li>• Taste is something connected to the tongue and the palate</li> <li>• Mouth - the munching machine</li> <li>• Travel of food through oesophagus</li> <li>• Stomach the mixer and digester</li> <li>• Travel of food from the stomach to the intestine</li> </ul>	<b>Total chapter</b>
8	Heredity and evolution	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• New characters and variations</li> <li>• Mendel and his experiments</li> <li>• Reasons for selecting pea plant</li> <li>• Procedure followed by Mendel</li> <li>• Monohybrid cross</li> <li>• Self pollination in F1-Generation</li> <li>• F2-Generation</li> <li>• Phenotype</li> <li>• Genotype</li> <li>• Dihybrid Cross</li> <li>• Mendel's Laws</li> <li>• Parent to progeny</li> <li>• How do traits get expressed?</li> <li>• Sex determination in human beings</li> <li>• Evolution</li> </ul>	-

Sl. No.	Name of the chapter	Topics in the syllabus	Activity / project based lessons
		<ul style="list-style-type: none"> <li>• Lamarckism</li> <li>• Darwinism</li> <li>• Speciation</li> <li>• Evidences of evolution</li> <li>• Evidences from embryology</li> <li>• Evidences from fossils</li> <li>• Human being - a moving museum</li> </ul>	
9	Our environment	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Food web</li> <li>• Ecological pyramids</li> <li>• The effects of human activities on ecosystems</li> <li>• Seasonal Bioaccumulation of heavy metals in fish (cyprinus carpio) of Edulabad Water Reservoir (EBWR)</li> <li>• Sparrow campaign</li> <li>• Steps towards prevention</li> </ul>	<b>Total chapter</b>
10	Natural Resources	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Case I: Situation of water resources Wanaparthy and Vaddicherla of Jangaon District</li> <li>• Water for all</li> <li>• Case II: A Study of Kothapally Village, an example of water management effort</li> <li>• Farmer-based interventions</li> <li>• Wasteland development and tree plantation</li> <li>• Natural resources around us</li> <li>• Forest: an important renewable resource</li> <li>• Soil</li> <li>• Biodiversity</li> <li>• Fossil fuels</li> <li>• Minerals</li> <li>• Conservation- A vital concern</li> <li>• Conservation groups</li> </ul>	<b>Total chapter</b>

## Class X – Social Studies

S. No.	Name of the Chapter	Topics in the syllabus	Activity/ project based lessons
<b>Part - I - Resources Development and Equity</b>			
1.	India: Relief Features	Location; Geological background; Major Relief Divisions; The Himalayas; The middle or Lower or Himachal Himalaya; The Shiwalik Range; The Indo-Gangetic Plain; The Peninsular Plateau; The Thar Desert; The Coastal Plains; The Islands.	-
2.	Ideas of Development	What Development Promises – Different People, Different Goals; Whose Development ?; Income and Other Goals; How to Compare Different Countries or States; Income and other criteria; Public Facilities; Human Development Report; Development as progress over time; Summing up.	-
3.	Production and Employment	Sectors of Economy; Gross Domestic Product; How do we estimate GDP?; Changes in the importance of sectors - value of goods and services produced and employment of people; Employment – the working life in India; Organised and unorganised sector employment in India; Narasimha; How to create more and better conditions of employment?.	-
4.	Climate of India	Climate and Weather; Factors influencing climate and weather; Latitude or distance from the equator; Land water relationship; Altitude; Upper atmospheric circulation; Seasons: Winter; Summer; Advancing monsoon; Global Warming and Climate Change; AGW and climate change; Impact of climate change on India.	-
5.	Indian Rivers and Water Resources	The Himalayan Rivers; Indian Peninsular Rivers; Water Use; Water use in the Tungabhadra	

S. No.	Name of the Chapter	Topics in the syllabus	Activity/ project based lessons
		river basin; Rational and equitable Use of water - an example; Water as common pool resource; In conclusion.	
6.	The Population	Conducting a Survey; What does the census show?; Literacy Rates (As per Census of 2011); Working population; Changing population size; Population density.	<b>Total chapter</b>
7.	Settlements - Migrations	What is a settlement?; How were settlements begun?; Why do settlements change?; What type of places are formed as settlements?; Indian settlements in hierarchy; Urbanisation in India; Problems of Urbanisation; Aerotropolis; Migration; Measure and classify migration patterns; Seasonal and Temporary Migration; Rural to Rural migration; Rural to Urban migration; International migration; What happens when people migrate?; Monitoring of International Migration.	<b>Total chapter</b>
8.	Rampur: A Village Economy	The story of Rampur village; Farming in Rampur; Land and other natural resources; Land Distribution in Rampur; Organisation of Production; Labour for the Farm; Capital: Arranging physical and working capital; Surplus or Loss for the farmer; Surplus and Capital for Production; Dairy - The other common activity; Small-scale manufacturing activities in Rampur; The shopkeepers of Rampur; Transport: A fast developing sector; Summing up.	<b>Total chapter</b>
9.	Globalisation	Production across Countries; Interlinking Production Across Countries; Foreign Trade and Integration of Market; MNCs and Globalisation; Factors that have	<b>Total chapter</b>

S. No.	Name of the Chapter	Topics in the syllabus	Activity/ project based lessons
		enabled Globalisation; Technology; Liberalisation of foreign trade and foreign investment policy; Institutions of Global Governance; World Trade Organisation; Impact of Globalisation in India; Small producers: Compete or perish; The Struggle for Fair Globalisation; Other Issues; Conclusion.	
10.	Food Security	Food Security of the Country; Increasing foodgrain production; Availability of Foodgrains; Availability of Other Food Items; Agricultural Diversification; Access to Food; Public Distribution System (PDS); PDS and Buffer Stock; Nutrition status; Summing up.	-
11.	Sustainable Development with Equity	Looking at development again...; The Environment and Development; People's Rights over The Environment; Chipko Movement; Towards Sustainable Development with Equity; Promoting the use of Millets; To sum up.	-
<b>Part - II - Contemporary World and India</b>			
12.	World Between the World Wars	Introduction; The Twentieth Century; Causes for the World Wars; Aggressive Nationalism; Secret Alliances; Militarism; Balkan politics; Immediate cause; The world after the First World War; The Treaty of Versailles, 1919; The Russian Socialist Revolution (1917-1922); Women in the February Revolution; The October Revolution and the Russian Countryside: Two Views; Central Asia of the October Revolution: Views; Rabindranath Tagore wrote from Russia in 1930; The Economic Depression–1929-1939; Economic Depression in Germany; Rise of Fascism, Nazism; From Hitler's speech;	-

S. No.	Name of the Chapter	Topics in the syllabus	Activity/ project based lessons
		Indoctrination; Women under Nazis; Resistance; Second World War – 1939-1945; Consequences of the World Wars; Enormous human cost; Democratic principles asserted; Change in balance of power; Enfranchisement of women; New International organisations.	
13.	National Liberation Movements in the Colonies	China: Two Different Phases; The Rise of the Communist Party of China; Establishing the New Democracy: 1949-1954; Land Reforms; Nigeria: Forming Unity against the Colonisers; British Colonialism and the Making of a Nation; Independence and weak democracy; Oil, environment and politics.	<b>Total chapter</b>
14.	National Movement in India–Partition & Independence: 1939-1947	Should the War be supported by Indians? 1939-42; Who represents the people of the country?; The “Pakistan” Resolution; Who Will Make the British Quit India?; The popular Upsurge -1946-48; Muslim League and Congress - Negotiation for transfer of power; A possible alternative to Partition; Partition and migrations; Assassination of Mahatma Gandhi; Integration of States.	-
15.	The Making of Independent India’s Constitution	Revisiting Indian Constitution; The Making of Indian Constitution; Reading Constituent Assembly Debates; Parliamentary system; Federalism; Examples of critiquing in Constituent Assembly debates; Examples of Debate on Fundamental Rights; Constitution and ‘social engineering’; The Constitution Today.	-
16.	Election Process in India	Election System in India; The Election Commission of India; Autonomous status for Election Commission; The Chief Election Commissioner; Functions of the Election Commission; Political	-

S. No.	Name of the Chapter	Topics in the syllabus	Activity/ project based lessons
		parties in Elections; Elections - The code of conduct; Key points of Code of Conduct; Conducting Rallies and Public Gatherings; On the day of Polling; Ruling party at the time of elections; Conduct of elections at various levels; Voting Mechanism; Vote to reject – NOTA (None Of The Above); The need for Electoral reforms; Postal Ballot; Cancellation of Elections.	
17.	Independent India (The First 30 years - 1947-77)	First General Elections; One Party Dominance in Political System; Demand for State Reorganisation; Social and Economic Change; Foreign Policy and Wars; The Succession; Anti-Hindi Agitation; Rise of Regional parties and Regional movements; Bangladesh War; The Left turn; Emergency; Summing up.	-
18.	Emerging Political Trends 1977 to 2000	Return of democracy after Emergency; 1977 Elections and the End of Emergency; Emergence of Regional Aspirations; Andhra Pradesh; Assam (Assom) Movement; The Punjab Agitation; New initiatives in the Rajiv Gandhi Era; Rise of Communalism and Corruption in High places; The Era of Coalition politics; The 'Left Front Government' in West Bengal; Political concerns in the last decade of the 20th century; Conclusion.	-
19.	Post - War World and India	Aftermath of the World War II; United Nations Organisation (UNO); The Two Camps and the Cold War (1945-1991); Non Alignment Movement (NAM); West Asian Conflicts; The Growth of Nationalism in the Middle East; Peace Movements, Collapse of the USSR and the end of the Cold	<b>Total chapter</b>

S. No.	Name of the Chapter	Topics in the syllabus	Activity/ project based lessons
		War; India and its Neighbours; India's Relationship with China; India's relation with Pakistan; India's relation with Bangladesh; India's relation with Sri Lanka.	
20.	Social Movements in Our Times	Civil Rights and Other Movements of 1960s; Human Rights Movements in the USSR; Anti-nuclear and Anti-war Movements; Globalisation, marginalised people and environmental movements; Bhopal Gas Disaster related movements; Environmental movements; Movements against dams on the Narmada river; Movement of Women for social justice and human rights; Social mobilisation on human rights; Some common features across social movements.	-
21.	The Movement for the Formation of Telangana State	The merger of Hyderabad state with India; The Gentlemen's Agreement and the Formation of the State of Andhra Pradesh; 1969 Agitation; Growing discontent in Telangana; Movements in 1990s; The Telangana Rashtra Samithi; K. Chandrashekar Rao's Fast-2009; In the process of achieving Telangana; Withdrawal of the Announcement; Telangana is Achieved; Professor Jayashankar (The Telangana ideologist).	-