



INTERNATIONAL PUBLIC SCHOOL

Affiliated to Central Board of Secondary Education, Delhi. (Aff. No. : 1030204)

SYLLABUS BIFURCATION OF Class XII (Science)



For
Monthly
Weekly
Co-scholastic Syllabi
Please visit <http://www.internationalpublicschools.in>

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Session 2024-25

English Syllabus

MONTH	CONTENT	PRACTICALS/PROJECT	ASSESSMENTS
March	1. The last Lesson 2. The Third Level Writing Skills - Notice		PA-I 1. The Last Lesson 2. The Third Level 3. The Lost Spring
April	3. The Lost Spring 4. Poem: My Mother at Sixty - Six 5. The Tiger King 6. Poem: Keeping Quiet		4. Poem: My Mother at Sixty-Six WS - Notice
June	7. Deep Water WS- Invitations & Replies		Half Yearly 1. The Last Lesson 2. The Third Level 3. The Lost Spring
July	8. Journey to the end of the Earth 9. Poem: A Thing of Beauty WS- Letter to Editor 10. The Rattrap		4. Poem: My Mother at Sixty-Six 5. The Tiger King 6. Poem: Keeping Quiet 7. Deep Water
August	11. The Enemy 12. Indigo 13. Poem: A Roadside Stand		8. Journey to the end of the Earth 9. Poem: A Thing of Beauty 10. The Rattrap 11. The Enemy 12. Indigo 13. Poem: A Roadside Stand
September	14. On the Face of It 15. Poets and Pancakes WS- Job Application with Resume		WS - * Notice • Invitations & Replies • Letter to Editor • Job Application

Hindustani Music (Vocal) Syllabus

MONTH	CONTENT	PRACTICALS/PROJECT/AIP	ASSESSMENTS
March	अलंकार, राग मालकौंस, जीवनी		
April	राग मालकौंस, नोटेशन राईटिंग, ताल झपताल		
June	राग मालकौंस, परिभाषा, समयचक्र, धमार		
July	राग शुद्धसारंग, जीवनी, नोटेशन राईटिंग		Periodic Assessment (40% of the Entire Syllabus)
August	राग बागेश्री, संगीत पारिजात, संगीत रत्नाकर		
September	राग बागेश्री, ताल धमार	PRACTICALS	Half Yearly (70% of the Entire Syllabus)
October	राग भैरव, तराना, ताल रूपक,		
November	राग रागिणी, नोटेशन राईटिंग, तानपुरे की जानकारी	PRACTICALS	Prelim-I (90% of the Entire Syllabus)
December	लोकगीत, भजन		
January	रिविजन	PRACTICALS	Prelim-II (100% of the Entire Syllabus)

Web Application Syllabus

		more than 8500 m	
August	Part B Unit 1 Movie Editing Tools.	Create a small Movie by using Window movie maker	
September	Part B Unit 2 Customizing and Embedding Multimedia components in Web Pages.	Write a java script to embed Audio & video in web page	
October	Part B Unit 4: Advanced feature of Web-Design	Create a web site of at least 10 to 15 web page	PRELIM-I & II (write here) All Course
November	Unit 4 : Entrepreneurial Skills Unit 5 : Green Skills	Activity XIII - Creativity Think of 10 unconventional uses of the following objects.... 1. Paper Clip 2. Tennis Ball 3. Clothes Hanger 4. Feather 5. Water bottle Choose any 4-5 Green Careers and prepare a brochure elaborating all the aspects like Educational Qualifications, Skills, Universities and colleges where these courses are available etc Practical file & project	Part A: Unit 1 TO Unit 5 Part B: Unit 1 To Unit 4

English Syllabus

October	16. The Interview 17. Memories of Childhood WS- Article and Report		PRELIM-I & II 1. The Last Lesson 2. The Third Level 3. The Lost Spring 4. Poem: My Mother at Sixty-Six 5. The Tiger King 6. Poem: Keeping Quiet 7. Deep Water 8. Journey to the end of the Earth 9. Poem: A Thing of Beauty 10. The Rattrap 11. The Enemy 12. Indigo 13. Poem: A Roadside Stand 14. On the Face of it 15. Poets and Pancakes 16. The Interview 17. Memories of Childhood 18. Going Places 19. Aunt Jennifer's Tigers
November	18. Going Places 19. Poem: Aunt Jennifer's Tigers		Tigers WS - * Notice • Invitations & Replies • Letter to Editor • Job Application • Article • Report

Tourism Syllabus

MONTH	CONTENT	ACTIVITIES (MA/SEA)	ASSESSMENTS
TERM- I			
March	Subject Specific Skills- Unit -1 Introduction to Travel & Tour Operations Business Employability Skills- Unit -1 Communication	Practical	PA-I Unit -1 Introduction to Travel & Tour Operations Business Unit-2 Operations of Travel Agency
April	Subject Specific Skills- Unit-2 Operations of Travel Agency Employability Skills- Unit-2 Self-Management		
June	Subject Specific Skills- Unit-3 Transport Network Unit-4 Itinerary Planning	Practical	Half Yearly Subject Specific Skill- Unit 1 to 4
July	Employability Skills- Unit 3- ITC		
August	Subject Specific Skills- Unit -5 Tour Packaging & Programming		Employability Skills- Unit 1 to 3
September	Revision & Half yearly exam		
TERM-II			
September	Subject Specific Skills- Unit -6 Package Tour Costing		PA-II Subject Specific Skills- Unit 5 and 6
October	Subject Specific Skills- Unit -7 Government & Professional Bodies Employability Skills- Unit 4- Entrepreneurship	Practical	
November	Subject Specific Skills- Unit -8 Global Distribution System Employability Skills- Unit -5 Green Skills		
December	Employability Skills- Unit -5 Green Skills		Annual Subject Specific Skills- Unit 1 to 8
January	REVISION		Employability Skills- Unit 1 to 5
February	Revision & Annual exam		Practical

Web Application Syllabus

MONTH	CONTENT	PRACTICALS/PROJECT	ASSESSMENTS
March	Part B Unit 3 –Web Scripting –Java Script	Java Script to add two number Java Script with if---Else Java Script with switch Java Script with loop	PA-I (write here) Unit 3 –Web Scripting –Java Script
April	Part B Unit 3 –Web Scripting –Java Script continue....	Java Script using maths function Java Script using Array (all method of array	
June	Part A Employability Skills Unit 1 : Communication Skills-	Group Discussion Designing poster on steps of Active Listening	Half Yearly (write here) Part A: Unit 1,2 & 3 Part B: Unit 1,2
July	Part A Unit 2 : Self-Management Skills- Unit 3: ICT Skills	Session A. Group Discussion on identifying needs and desires in general Session B. Discussion on sources of motivation and inspiration, finding their own sources Session C. Demonstrate the knowledge of different personality types. Try to identify your own personality Session D. Essay on reflections on self-personality type 1. Create the following worksheet and perform the following operations: a. Sort the table in ascending order of height. b. Filter the data to view only those rows where height is	

Yoga Syllabus

TERM-II			
September	Significance of hath yoga practices in health promotion.		P.A.II Introduction to yoga texts.
October	Concept of mental health well being according to patanjali yoga. Yogic practice of patanjali yoga Bahiranga and antranga yoga. Concept of healthy living style in bhagvad gita.	Doing various yoga exercise and asans for good health. Reading important shlokas from bhagvad gita.	
November	Importance of subjective experience in daily yoga practice.		
December	1. Yoga for health promotion Introduction to first and CPR. Yogic management of stress and its consequences Yogic prevention of common diseases. Yoga and personality development.	Using dummy rubber body for CPR and first aid. Introducing different personalities and various changes through yoga.	Annual Exam 1. Introduction to yoga and yogic practices. 2. Introduction to yoga texts. 3. Yoga for health promotion.
January	Revision		
February	Revision & Annual exam		

Mathematics Syllabus

MONTH	CONTENT	PRACTICALS/ PROJECT	ASSESSMENTS
March	Matrices, Determinants and Linear Programming problems	Activities 1 and 2	P.A.1 Matrices, Determinants and Linear Programming problems
April	Inverse Trigonometric Functions, Continuity and Differentiability	Activities 3 and 4	
May	Application of Derivatives	Activities 5 and 6	(Half Yearly Syllabus) 1. Matrices, 2. Determinants 3. Linear Programming problems 4. Continuity and Differentiability 5. Application of Derivatives 6. Integrals 7. Three Dimensional Geometry 8. Probability 9. Applications of Integrals 10. Differential Equations
June	Integrals	Activities 7 and 8	
July	Applications of Integrals and Differential Equations	Activities 9 and 10	
August	Vector and its applications		
September	Three Dimensional Geometry and Probability		
October	Relation and Functions Revision		
November and December	Revision		Prelim Full Syllabus
January	Revision		

Biology Syllabus

MONTH	CONTENT	PRACTICALS/PROJECT	ASSESSMENTS
March	Chapter 2: Sexual Reproduction in Flowering Plants Chapter 3: Human Reproduction	<ul style="list-style-type: none"> Prepare a temporary mount to observe pollen germination Pollination of different agencies Controlled pollination Emasculation bagging and Tagging 	PA-I EXAM 22 nd TO 27 th APRIL
April	Chapter 4: Reproductive Health Chapter 5: Principles of Inheritance and Variation	<ul style="list-style-type: none"> Identification of T.S. of testis. T.S of blastula and T.S. of ovary through permanent slides Prepare a temporary mount of onion root tip to study mitosis 	Chapter 2: Sexual Reproduction in Flowering Plants Chapter 3: Human Reproduction Chapter 4: Reproductive Health
May	Chapter 6: Molecular Basis of Inheritance	<ul style="list-style-type: none"> Mendelian inheritance using seeds of different color /sizes of any plant Isolate DNA from available plant material 	
June	Chapter 7: Evolution	<ul style="list-style-type: none"> Flash cards models showing examples of homologous and analogous organs 	HALF YEARLY EXAM 10 th TO 21 st SEPTEMBER
July	Chapter 8: Human Health and Disease Chapter 10: Microbes in Human Welfare	<ul style="list-style-type: none"> Common disease-causing organisms Like Ascaris, Entamoeba, Plasmodium, Roundworm through Permanent slides. Study of pedigree charts 	Chapter 2: Sexual Reproduction in Flowering Plants Chapter 3: Human Reproduction Chapter 4: Reproductive Health Chapter 5: Principles of Inheritance and Variation
August	Chapter 11: Principle of Biotechnology, Recombinant Chapter 12: Biotechnology and its Applications.		Chapter 6: Molecular Basis of Inheritance Chapter 7: Evolution Chapter 8: Human Health and Disease
September	Chapter 13: Organisms and Population	<ul style="list-style-type: none"> Symbiotic association in root nodules of leguminous plants, Cuscuta on host, lichens. Study the plant population density - quadrat method. 	Chapter 10: Microbes in Human Welfare Chapter 11: Principle of Biotechnology, Recombinant
October	Chapter 14: Ecosystem Chapter 15: Biodiversity and Conservation	<ul style="list-style-type: none"> Study the plant population frequency by quadrant method. 	PRELIM-I 23 rd TO 30 th NOVEMBER
November	Chapter 15: Biodiversity and Conservation		Chapter 2: Sexual Reproduction in Flowering Plants Chapter 3: Human Reproduction

Yoga Syllabus

MONTH	CONTENT	ACTIVITIES AND PRACTICALS	ASSESSMENTS
TERM- I			
March	1: Communication skills 2 . Self Management skills	1. Group discussions. 2. Debate competition.	1: Communication skills 2 . Self Management skills Information.
April	3. Introduction to yoga and yogic Practice. 4. Introduction to yoga text.	3.Satkarma meaning and purpose Information and communication technology skills. Satakarma meaning and their significance in yoga sadhana. 4. To verify the laws of combination (parallel) of resistances using a metre bridge	3 communication technology skills. Satakarma meaning and their significance in yoga sadhana.
May	3. Yogaasana	Performing yoga asanas.	
June	4. Introduction to pranayam and dhyana and their health benefits.	1. Introduction pranayam and dhyana and their health benefits. 2. Performing yogic activities.	Half Yearly 1. Communication and self management skills.
July	Identify career opportunities in yoga	Using live examples from smart board.	2. Introduction to yoga and yogic practice.
August	Concept of ahara (diet) according to yogic text	Using balanced diet and nutritional charts.	3. Introduction to yoga text.
September	REVISION & HALF YEARLY EXAM		4. Yogasnas. 5. Introduction to pranayam and dhyana and their health benefits.

Physical Education Syllabus

	with Special Needs - Divyang)	Hypertension, Diabetes, Back Pain and Asthma ❖ To make students understand the concept of Disability and Disorder.	
August	Unit- 5 Sports and Nutrition		
September	Revision & Half yearly exam		
TERM-II			
September	Unit 7 Physiology & Injuries in Sports	❖ Understanding the physiological factors determining the components of physical fitness	PRELIM I Unit-1 Management of Sporting Events Unit-2 Children and Women in sports
October	Unit-8 Biomechanics and Sports Unit- 9 Psychology and Sports	❖ Understanding Newton's Laws of Motion and their Application in Sports.. ❖ To make students understand Personality & its classifications	Unit-3 Yoga as Preventive measure for Lifestyle Disease Unit- 4 Physical Education and Sports for CWSN Unit- 5 Sports and Nutrition Unit- 6 Test and measurement in Sports Unit-10 Training in Sports Unit- 7 Physiology and injuries in sports
November	Revisions		Unit-8 Biomechanics in Sports Unit- 9 Psychology and Sport
December			
January	REVISION		
February			

Biology Syllabus

			<p>Chapter 4: Reproductive Health Chapter 5: Principles of Inheritance and Variation Chapter 6: Molecular Basis of Inheritance Chapter 7: Evolution Chapter 8: Human Health and Disease Chapter 10: Microbes in Human Welfare Chapter 11: Principle of Biotechnology, Recombinant Chapter 12: Biotechnology and its Applications. Chapter 13: Organisms and Population Chapter 14: Ecosystem</p>
December		Revision	<p>PRELIM-II 16th TO 23rd December Chapter 2 to 15</p> <p>Chapter 2: Sexual Reproduction in Flowering Plants Chapter 3: Human Reproduction Chapter 4: Reproductive Health Chapter 5: Principles of Inheritance and Variation Chapter 6: Molecular Basis of Inheritance Chapter 7: Evolution Chapter 8: Human Health and Disease Chapter 10: Microbes in Human Welfare Chapter 11: Principle of Biotechnology, Recombinant Chapter 12: Biotechnology and its Applications. Chapter 13: Organisms and Population Chapter 14: Ecosystem Chapter 15: Biodiversity and Conservation</p>

Chemistry Syllabus

MONTH	CONTENT	Practical/project	ASSESSMENTS
TERM I			
March	Unit 1 solution Unit-6-Haloalkanes and Haloarenes	1. To determine the strength and molarity of KMnO_4 with the help of standard Mohr salt solution	PA-I Unit 2 solution Unit-10-Haloalkanes and Haloarenes
April	Unit-6-Haloalkanes and Haloarenes Unit-7 Alcohols Phenol and Ethers	2. To determine the strength and molarity of KMnO_4 with the help of standard Mohr salt solution	
June	Unit-7 Alcohols Phenol and Ethers	3. To determine the strength and molarity of KMnO_4 with the help of standard oxalic acid	Half Yearly Unit 2 solution Unit-10-Haloalkanes and Haloarenes Unit-11 Alcohols Phenol and Ethers Unit-8 d and f block elements Unit-9 Coordination chemistry
July	Unit-4 d and f block elements Unit-5 Coordination chemistry	Salt Analysis:	
August	Unit-5 Coordination chemistry Unit-2 Electrochemistry	Salt Analysis:	
September	Unit 3 Chemical Kinetics		
TERM II			
October	Unit-8 Aldehydes ketones and carboxylic acid Unit-9-Amines and nitrogen containing compounds	Detection of functional group in an organic compound	Prelim 1 and 2 Unit 2 solution Unit-8 d and f block elements Unit-9 Coordination chemistry Unit-10-Haloalkanes and Haloarenes Unit-11 Alcohols Phenol and Ethers Unit-15 Biomolecules Unit-3 Electrochemistry Unit 4 Chemical Kinetics Unit-12 Aldehydes ketones and carboxylic acid Unit-13-Amines and nitrogen containing compounds
November	Unit-10 Biomolecules	Detection of functional group in an organic compound Chromatography	
December	Revision	Detection of functional group in an organic compound Chromatography	
January	Revision		
February	Revision		

Physical Education Syllabus

MONTH	CONTENT	ACTIVITIES AND PRACTICALS	ASSESSMENTS
TERM- I			
March	Unit 1 Management of Sporting Events	* Describe the functions of Sports Event management * Differentiate the different types of tournaments.	PA I Unit 1 Management of Sporting Events Unit 6 Test & Measurement in Sports
April	Unit 6 Test & Measurement in Sports	* Perform SAI Khelo India Fitness Test in school [Age group 5-8 years/ (class 1-3) and Age group 9-18yrs/ (class 4-12)]	
May	Unit 10 Training in Sports	❖ Making the students understand the concept of talent identification and methods in sports	
June	Unit 2 Children & Women in Sports	❖ To make students understand the exercise guidelines of WHO for different age groups	Half Yearly Unit-1 Management of Sporting Events Unit-2 Children and Women in sports Unit-3 Yoga as Preventive measure for Lifestyle Disease Unit- 4 Physical Education and Sports for CWSN Unit- 5 Sports and Nutrition Unit- 6 Test and measurement in Sports Unit-10 Training in Sports
July	Unit-3 Yoga as Preventive measure for Lifestyle Disease Unit 4 Physical Education and Sports for CWSN (Children	❖ To make students Understand about the main life style disease - Obesity,	

Physics Syllabus

TERM-II			
September	8. Electromagnetic Waves 9. Ray Optics and Optical instruments.(cont..)	1. To find the value of v for different values of u in case of a concave mirror and to find the focal length.	PA-II 8.Electromagnetic Waves 9. Ray Optics and Optical instruments
October	9. Ray Optics and Optical instruments.(cont..) 10. Wave Optics 11. Dual Nature of Matter and radiation(contd.)	2.To find the focal length of a convex lens by plotting graphs between u and v or between $1/u$ and $1/v$.	
November	11. . Dual Nature of Matter and radiation. 12.Atom 13.Nuclie.	3.To determine angle of minimum deviation for a given prism by plotting a graph between angle of incidence and angle of deviation. 4.To find the refractive index of a liquid using a concave mirror and a plane mirror. 5. To draw the I-V characteristic curve for a p-n junction diode in forward and reverse bias	
December	14. Semiconductors		Annual 1. Electric Charges and Fields and 2. Electrostatic Potential and Capacitance. 3. Current Electricity 4. Moving Charges and Magnetism 5.Magnetism and Matter 6.Electromagnetic Induction 7.Alternating Current 8.Electromagnetic Waves 9. Ray Optics and Optical instruments 10. Wave Optics 11. Dual Nature of Matter and radiation 12.Atom 13.Nuclie 14. Semiconductors.
January	Revision		
February	Revision & Annual Exam		

Painting Syllabus

MONTH	CONTENT	PRACTICALS/ PROJECT/AIP	ASSESSMENTS
March April (PA-I)	Unit – 1, The Rajasthani and Pahari School of Miniature Painting	Still life Composition	PA-I (10% of the Entire Syllabus) Unit – 1, Still life- 2 Composition - 2
June July August September	Unit- 2, The Mughal and Deccan School of Miniature Painting Unit – 3, The Bengal School of Painting	Still life Composition	
			Half Yearly (50% of the Entire Syllabus) Unit – 1,2, Still life – 10 Composition - 10
			PA-II (70% of the Entire Syllabus) Unit – 1,2,3, Still life – 15 Composition - 15
October November December January	Unit – 3 , The modern Trends in Indian Art	Still life Composition	Annual Exam (100% of the Entire Syllabus) Unit – 1,2,3 Still life – 20 Composition - 20
			Prelim-II (100% of the Entire Syllabus) Unit – 1,2,3

Computer Syllabus

MONTH	CONTENT	PRACTICALS/PROJECT	ASSESSMENTS
March	Chap. 1: Python Revision Tour I	1. Python program on matrix addition, subtraction & multiplication	PA-I (write here) Chap 1 to 3
April	Chap. 2 : Python Revision Tour II Chap. 3: Working with function	1. program to take a string with multiple words & convert first character of each word in capital 2. program to take a list and arrange even & odd elements of list in two different list. 3. Python program based on function like calculation of area ,use of arithmetic operator	
June	Chap. 4: python library (Modules & library) Chap. 5: file handling(Text & Binary file)	1. Python program to import Python modules and library 2. Python program to create, write & read a text & binary file . 3. To count no. words from the file 4. Creating Binary file 5. Writing & reading data in Binary file.	Half Yearly (write here) Chap 1 to 11
July	Chap. 6: Recursion Chap 7: idea of Algorithmic efficiency Chap -8: Data Structure Chap 9: Data structure	1. Program showing Binary recursion 2. Program showing Fibonacci recursion 3. Write a algo to implement binary search 4. write a algo to implement all operation of stacks and Queue. 5.Program on searching element from list (binary & linear search)	
August	Chap 10: Relational database Chap 11: Simple queries in SQL	1. Creating database and tables 2. Select query with all clause 3. Write update & delete command to modify & delete record	
September	Chap 12: Table creation and data manipulation command	1. Creating database and tables with all constraints 2. Alter with all option 3. Drop with all option	
October	Chap 13: Grouping , Join in SQL Chap 14: Interface python with Mysql	1. Group by queries with all options 2. Write a query to join two table depending on condition (all join queries) 3. Program to show all records of database 4. Program to insert records in database 5. Program to update specific records 6. Programs to delete a records	PRELIM-I & II (write here) Chap 1 to 15
November	Chap 15. : Society Laws & ethics	-----	

Physics Syllabus

MONTH	CONTENT	ACTIVITIES AND PRACTICALS	ASSESSMENTS
TERM- I			
March	1: Electric Charges and Fields and 2. Electrostatic Potential and Capacitance (continued..)	1.To determine resistivity of two / three wires by plotting a graph for potential difference versus current.	PA-I 1: Electric Charges and Fields and 2. Electrostatic Potential and Capacitance
April	2. Electrostatic Potential and Capacitance 3. Current Electricity (Continued)	2. To find resistance of a given wire / standard resistor using metre bridge. 3. To verify the laws of combination (series) of resistances using a metre bridge. 4. To verify the laws of combination (parallel) of resistances using a metre bridge	
May	3. Current Electricity	5.To determine resistance of a galvanometer by half-deflection method and to find its figure of merit	
June	4. Moving Charges and Magnetism(cont...)	1. To assemble a household circuit comprising three bulbs, three (on/off) switches, a fuse and a power source. 2. To assemble the components of a given electrical circuit. 3. To study the variation in potential drop with length of a wire for a steady current. 4.To draw the diagram of a given open circuit comprising at least a battery, resistor/rheostat, key, ammeter and voltmeter. Mark the components that are not connected in proper order and correct the circuit and also the circuit diagram	Half Yearly 1: Electric Charges and Fields and 2. Electrostatic Potential and Capacitance. 3. Current Electricity 4. Moving Charges and Magnetism 5.Magnetism and Matter 6.Electromagnetic Induction 7.Alternating Current
July	4.Moving Charges and Magnetism. 5.Magnetism and Matter	1.To identify a diode, an LED, a resistor and a capacitor from a mixed collection of such items. 2. Use of multimeter to see the unidirectional flow of current in case of a diode and an LED and check whether a given electronic component (e.g., diode) is in working order. 3.To study the nature and size of the image formed by a (i) convex lens, or (ii) concave mirror, on a screen by using a candle and a screen (for different distances of the candle from the lens/mirror). 4. To observe refraction and lateral deviation of a beam of light incident obliquely on a glass slab.	
August	6: Electromagnetic Induction 7: Alternating Current		
September	Revision & Half Yearly Exam		