DAV CENTENARY PUBLIC SCHOOL , PASCHIM ENCLAVE , NEW DELHI-87

SYLLABUS (2024-25) CLASS-XII (SCIENCE)

MATHEMATICS

SYLLABUS OF HALF-YEARLY EXAM (TERM-I)

S.NO.	CONTENT	
1.	Matrices	
2.	Determinants	
3.	Relations and Functions	
4.	Inverse Trigonometric Functions	
5.	Continuity and Differentiability	
6.	Application of Derivatives	
7.	Integrals	
8.	Application of Integrals	
9.	Linear Programming	

SYLLABUS OF ANNUAL EXAM (TERM-II)

S.NO.	CONTENT	
1.	Differential Equations	
2.	Vectors	
3.	Three-Dimensional Geometry	
4.	Probability	
	Note: Annual Examination- CBSE BOARD- Full Syllabus	

SYLLABUS FOR SPECIAL TEST, PERIODIC TEST AND PRE-BOARD

SPECIAL TEST (APRIL-MAY)	PT-I (JULY)	SPECIAL TEST (NOVEMBER)	PRE-BOARD -1 (DECEMBER)	PRE-BOARD-2 (JANUARY)
Matrices	Relations and Functions	Integrals	Full Syllabus	Full Syllabus
Determinants	Inverse Trigonometric Functions	Application of Integrals		
	Continuity and Differentiability	Differential Equations		

PHYSICS

SYLLABUS OF HALF-YEARLY EXAM (TERM-I)

S.NO.	CONTENT	
1.	CHARGE &COULOMB'S LAW	
2.	ELECTRIC FIELD & FLUX	
3.	ELECTRIC POTENTIAL	
4.	CAPACITANCE	
5.	CURRENT ELECTRICITY	
6.	MOVING CHARGE & MAGNETISM	
7.	MAGNETISM & MATTER	
8.	ELECTROMAGNETIC INDUCTION	
9.	ALTERNATING CURRENT	
10.	ELECTROMAGNETIC WAVES	

SYLLABUS OF ANNUAL EXAM (TERM-II)

S.NO.	CONTENT	
1.	RAY OPTICS	
2.	WAVE OPTICS	
3.	DUAL NATURE OF RADIATION AND MATTER	
4.	ATOM	
5.	NUCLIE	
6.	ELECTRONIC DEVICES: SEMICONDUCTOR &	
	SIMPLECIRCUITS	

NOTE: Syllabus of first term also included in the second term examination.

SYLLABUS FOR CLASS TEST / SPECIAL TEST AND PERIODIC TEST

SPECIAL / CLASS TEST (APRIL-MAY)	PT-I (JULY)	SPECIAL TEST (OCTOBER/NOVEMBER)	PRE-BOARD-I	PRE-BOARD -II
 Electric charges Electric field & flux Electric potential Capacitance 	 Current electricity Magnetic effects of current Moving charge and magnetism 	Ray opticsWave optics	Entire Syllabus	Entire Syllabus

CHEMISTRY

SYLLABUS FOR CLASS TEST / SPECIAL TEST AND PERIODIC TEST

SPECIAL / CLASS TEST	PT-I	HALF YEARLY EXAM	SPECIAL TEST	PRE-BOARD-I	PRE-BOARD-II
(APRIL-MAY)	(JULY)	(SEPTEMBER)	(OCTOBER/NOVEMBER)		
ALKYL HALIDE AND	AMINES	ALKYL HALIDE AND ARYL	CHEMICAL KINETICS	WHOLE	WHOLE
ARYL HALIDE		HALIDE		SYLLABUS	SYLLABUS
	ALCOHOL,	ALCOHOL, PHENOL AND ETHER	CO-ORDINATION		
	PHENOL AND		COMPOUNDS		
	ETHER				
		ALDEHYDE, KETONE AND			
		CARBOXYLIC ACID			
		AMINES			
		BIOMOLECULES			
		SOLUTION			
		ELECTROCHEMISTRY			

* Syllabus of Annual Term includes both TERM I and TERM II

BIOLOGY

SYLLABUS OF HALF-YEARLY EXAM (TERM-I)

S.NO.	CONTENT	
1.	Sexual Reproduction in Flowering Plants	
2.	Human Reproduction	
3.	Reproductive Health	
4.	Principles of Inheritance	
5.	Molecular Basis of Inheritance	
6.	Human Health	

SYLLABUS OF ANNUAL EXAM (TERM-II)

S.NO.	CONTENT	
1.	Microbes in Human welfare	
2.	Biotechnology - principles and processes	
3.	Biotechnology and its application	
4.	Evolution	
5.	Organisms and population	
6.	Ecosystem	
7.	Biodiversity and conservation	
8.	Along with first term chapters	

* Syllabus of Annual Term includes both TERM I and TERM II

SYLLABUS FOR CLASS TEST / SPECIAL TEST AND PERIODIC TEST

SPECIAL / CLASS TEST (APRIL-MAY)	PT-I (JULY)	PT-II (NOVEMBER)	PT-III (JANUARY)	SPECIAL TEST/ PRE-BOARD
Sexual Reproduction in flowering plants	1.Sexual Reproduction in flowering plants	Full course	Full course	Full course
	2. Human Reproduction			

COMPUTER SCIENCE

SYLLABUS OF HALF YEARLY EXAM (TERM -I)

Sno.	CONTENT	
1	Relational Databases	
2	Simple Queries in SQL	
3	Interface Python with MySQL	
4	Working with Functions	
5	Python Revision Tour-I	
6	Python Revision Tour -II	
7	Using Python Libraries	

SYLLABUS OF ANNUAL EXAM (TERM -II)

Sno.	CONTENT	
1	Relational Databases	
2	Simple Queries in SQL	
3	Interface Python with MySQL	
4	Working with Functions	
5	Python Revision Tour-I	
6	Python Revision Tour -II	
7	Using Python Libraries	
8	File Handling	
9	Data Structures: Stacks	
10	Exception Handling	

Specia	Special Test/Class Test			Special Test	Special Test
(April-	(April-May)			(November)	(Pre Board)
1.	Relational Databases	1.	Relational Databases	** Same as Annual	** Same as Annual Exam
2.	Simple Queries in SQL	2.	Simple Queries in SQL	Exam	
		3.	Interface Python with Mysql		
		4.	Python Revision Tour -I		

PHYSICAL EDUCATION

Theory - 70 Marks Practical - 30 Marks Total - 100 Marks 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 (Children with special needs - Divyang) Unit 5 Sports and nutrition Unit 6 Test and measurement in sports Unit 7 Physiology and injuries in sports Unit 8 Biomechanics and sports Unit 9 Psychology and sports Unit 10 Training in sports

Special Test (April - May)

Unit 1 Management of sporting events Unit 2 Children and women in sports

P.T. I (July) Unit 5 Sports and nutrition Unit 6 Test and measurement in sports

Syllabus for 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 (Children with special needs - Divyang) Unit 5 Sports and nutrition Unit 6 Test and measurement in sports Unit 7 Physiology and injuries in sports

Special Test (November) 6 Physiology and injuries in sports 7 Biomechanics and sports

PRE BOARD 1 (December) Full syllabus

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 (Children with special needs - Divyang) Unit 5 Sports and nutrition Unit 6 Test and measurement in sports Unit 7 Physiology and injuries in sports Unit 8 Biomechanics and sports Unit 9 Psychology and sports Unit 10 Training in sports

ARTIFICIAL INTELLIGENCE

SYLLABUS OF HALF YEARLY EXAM (TERM -I)

S.NO.	CONTENT		
1.	Unit 1: Capstone Project		
2.	Unit 2: Model Lifecycle		
3.	Employability SKILLS		

SYLLABUS OF ANNUAL EXAM (TERM -II)

S.NO.	CONTENT		
1. Unit 1: Capstone Project			
2. Unit 2: Model Lifecycle			
3. Unit 3: Storytelling Through Data			
4. Employability SKILLS			

Special Test	PT-1	Special Test	Pre-Board-1	Pre-Board-2
(April-May)	(July)	(November)	(December)	(January)
Unit 1: Capstone Project	Unit 2: Model Lifecycle	Unit 3: Storytelling Through Data	Full Syllabus	Full Syllabus

S.NO.	PRACTICAL
1.	Student Capstone Project (PRACTICAL)
	Student AI project Development & Presentation (Teamwork): Submission of Project Logbook and Video presentation

<u>ENGLISH</u>

SYLLABUS OF HALF-YEARLY EXAM (TERM-I)

S.NO.	CONTENT
1.	SECTION A – READING SKILLS:
	A. One Unseen Passage for comprehension
	B. One case-based comprehension passage
2.	Writing Skills
	A. Notice writing
	B. Invitations(all types) and their replies
	C. Letter writing (to the editor, job application)
	D. Article/Report writing
3.	Literature
	Flamingo: The Last Lesson, My Mother at Sixty-six, Lost
	Spring, Deep Water, Keeping Quiet, A Thing of Beauty
	The Rattrap, Indigo, A Roadside Stand
	Vistas: The Third Level, The Tiger King, Journey to the End of
	the Earth, The Enemy

SYLLABUS OF ANNUAL EXAM (TERM-II)

S.NO.	CONTENT
1.	SECTION A – READING SKILLS:
	One Unseen Passage for comprehension
	One case-based comprehension passage
2.	Writing Skills
	A. Notice writing
	B. Invitations(all types) and their replies
	C. Letter writing (to the editor, job application)
	D. Article/Report writing
3.	Literature
	Flamingo: The Last Lesson, My Mother at Sixty-six, Lost
	Spring, Deep Water, Keeping Quiet, A Thing of Beauty
	The Rattrap, Indigo, Poets and Pancakes, A Roadside Stand
	The Interview, Going Places, Aunt Jennifer's Tigers
	Vistas: The Third Level, The Tiger King, Journey to the End of
	the Earth, The Enemy, On the Face of it, Memories of
	Childhood

SYLLABUS FOR CLASS TEST / SPECIAL TEST AND PERIODIC TEST

SPECIAL / CLASS TEST	PT-I	SPECIAL TEST	SPECIAL TEST/
(APRIL-MAY)	(JULY)	(NOVEMBER)	PRE-BOARD
class test: The Last Lesson,	Third Level, The Tiger King,	SECTION A - READING	SECTION A - READING
My Mother at Sixty-six,	Keeping Quiet	SKILLS:	SKILLS:
notice writing		A. One Unseen Passage for	A. One Unseen Passage for
		comprehension	comprehension
		B. One case-based	B. One case-based
		comprehension passage	comprehension passage
		Writing Skills	Writing Skills
		A. Notice writing	A. Notice writing
		B. Invitations(all types) and	B. Invitations(all types) and
		their replies	their replies
		C. Letter writing (to the	C. Letter writing (to the
		editor, job application)	editor, job application)
		D. Article/Report writing	D. Article/Report writing
		Literature	Literature
		Flamingo: The Last Lesson,	Flamingo: The Last Lesson,
		My Mother at Sixty-six, Lost	My Mother at Sixty-six, Lost
		Spring, Deep Water,	Spring, Deep Water,
		Keeping Quiet, A Thing of	Keeping Quiet, A Thing of
		Beauty, The Rattrap, Indigo,	Beauty, The Rattrap, Indigo,
		Poets and Pancakes, A	Poets and Pancakes, A
		Roadside Stand	Roadside Stand, The
		Vistas: The Third Level, The	Interview, Going Places,
		Tiger King, Journey to the	Aunt Jennifer's Tigers
		End of the Earth, The	Vistas: The Third Level, The
		Enemy	Tiger King, Journey to the
			End of the Earth, The
			Enemy, On the Face of it,
			Memories of Childhood