A.S.M. MODERN ACADEMY

A Senior Secondary Co-Educational School Affiliated to C.B.S.E New Delhi

SYLLABUS FOR ACADEMIC YEAR (2025-26) **Class - XII (Science)**

Sub	PA-1		Half Yearly / (S.A-I)	PA-2	Annual / (S.A-II)
	MAY TEST	AUG TEST			
PHYSICS	Ch-1 (Electric charge and field) Ch-2 (Electrostatic potential & capacitance) Ch-3 Current Electricity	Ch-4 (Moving charge & Magnetism) Ch-5(Magnifism & Matter) Ch-6 Electro magnetic Induction	Ch-1 (Electric charge and field) Ch-2 (Electrostatic potential & capacitance) Ch-3 (Current Electricity) Ch-4 (Moving charge & Magnetism) Ch-5 (Magnifism & Matter) Ch-6 Electromagnetic Induction. Ch-7 A.C. Ch-8 E.M. Waves Ch-9 Ray optics & optica Instuments Ch-10 Wave Optics	Full Syllabus	Pre- Board
CHEMISTRY	Ch-1(Solution) Ch-2(Electrochemistry) Ch-3 Chemical Kinetics	Ch-4 d & f block Element Ch-5 Coordination compound Ch-6 (Halo alkane & haloarenes)	Ch-1(Solution) Ch-2(Electrochemistry) Ch-3(Chemical Kinetics) Ch-4(d & f-block Element) Ch-5 Coordination compound Ch-6 (Halo alkane & haloarenes) Ch-7 Alcohol, Phenol & Ether Ch-8 Aldehyde, Ketone & Carboxylic Acid	Ch-1(Solution) Ch-2(Electrochemistry) Ch-3(Chemical Kinetics) Ch-4(d & f-block Element) Ch-5(Coordination Compound) Ch-6 (Halo alkane & haloarenes) Ch-7(Alcohol,Phenol & Ether) Ch-8(Aldehyde, Ketone and Carboxylic Acid) Ch-9(Amines) Ch-10(Biomolecules)	Pre- Board
BIOLOGY	Ch-1(Sexual Reproduction in Flowering plants.) Ch-2 (Human Reproduction) Ch-3 (Reproductive Health)	Ch-4 (Principal of inheritance & Variation) Ch-5 (Molecular Basis of Inheritance) Ch-6 (Evolution) Ch-7 (Human health & Disease)	Ch-8 (Microbes in Human willfare) Ch-9 Biotechnology-Principales & processes) Ch-10 (Biotechnology & Its Application) Ch-11 Organism & Population + PA-1 + SA-1	Ch-11 Organism & Population. Ch-12 Ecosystem. Ch-13 Biodiversity & Conversation. (All syllabus Covered in previous assessments)	Pre- Board

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Sub	PA-1		Half Yearly / (S.A-I)	PA-2	Annual / (S.A-II)
	MAY TEST	AUG TEST			
MATHS	Ch-3 (Matrices) Ch-4 (Determinats) Ch-10 Vector	Ch-1(Relations & Functions) Ch-2 (Inverse trigonometric functions) Ch-5 (Continuity & Differentiability) Ch-11 Three dimensional Geometry Ch-12 Linear progaming	Ch-1(Relations & Functions) Ch-2 (Inverse trigonometric functions) Ch-3 (Matrices) Ch-4 (Determinants) Ch-5 (Continuity & Differentiability) Ch-6 (Application of Derivatives) Ch-7 (Integral) Ch-10 Vector Ch-11 Three dimensional geometry Ch-12 Linear programing)	Ch-1(Relations & Functions) Ch-2 (Inverse trigonometric functions) Ch-3 (Matrices) Ch-4 (Determinants) Ch-5 (Continuity & Differentiability) Ch-6 (Application of Derivatives) Ch-7 (Integral) Ch-8 (Application of Integrals) Ch-9 (Differential of Equations) Ch-10 (Vectors) Ch-11 (Three Dimensial Geomentry) Ch-12 (Linear Programming) Ch-13 (Probability) Full Syllabus	Pre-Board
PHY. EDU.	Unit-1 -Management and sporting. Unit -2 Children & Women in Sports.	3 Yoga as Preventive Message For life style. **Unit-4** Physical Education & Sports For CSWN. **Unit-5** Sports & Nutrition	Unit-1 -Management and sporting. Unit -2 Children & Women in Sports. Unit-3 Yoga as Preventive Message For life style. Unit-4 Physical Education & Sports For CSWN. Unit-5 Sports & Nutrition Unit-6 Test & Measurement. Unit-7 Physiology & Injuries in sports.	All Syllabus	Pre-Board

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Sub	PA-1		Half Yearly / (S.A-I)	PA-2	Annual / (S.A-II)
	MAY TEST	AUG TEST			
ENGLISH	**Literature:** Flamingo - Prose: 1. The Last Lesson 2. Lost Spring **Poetry:** 1. My Mother at Sixty Six **Vistas -** 1. The Third Level **Writing Skills:** 1. Invitations(Formal & Informal) 2. Replies to the inventions	**Reading Skills:** 1. Comprehension (factual/ descriptive) **Writing Skills:** 1. Notice Writing 2. Job Application **Literature:** **Flamingo - Prose:** 1. Deep Water 2. The Rattrap **Poetry:** 1. Keeping Quiet 2. A Thing of Beauty **Vistas -** 1. The Tiger King 2. Journey to the end of the Earth	**Reading Skills:** 1. Comprehension (factual/descriptive) 2. Case Study **Writing Skills:** 1. Notice Writing 2. Invitation & their replies 3. Job Application 4. Letter to the Edito **Literature:** Flamingo - Prose: 1. The Last Lesson, 2. Lost Spring 3. Deep Water, 4. The Rattrap 5. Indigo, 6. Poets and Pancakes **Poetry:** 1. My Mother at Sixty-Six, 2. Keeping Quiet 3. A Thing of Beauty **Vistas -** 1. The Third Level, 2. The Tiger King 3. Journey to the end of the Earth 4. The Enemy, 5. On the Face of It	**Reading Skills:** 1. Comprehension (factual,descriptive & literary) 2. Case Study **Writing Skills:** 1. Notice Writing 2. Invitation & their replies 3. Job Application 4. Letter to the Editor 5. Article Writing 6. Report Writing **Literature:** **Flamingo - Prose:** 1. The Last Lesson, 2. Lost Spring 3. Deep Water, 4. The Rattrap 5. Indigo, 6. Poets and Pancakes 7. The Interview, 8. Going Places **Poetry:** 1. My Mother at Sixty-Six 2. Keeping Quiet 3. A Thing of Beauty 4. A Roadside Stand 5. Aunt Jennifer's Tigers **Vistas:** 1. The Third Level 2. The Tiger King 3. Journey to the end of the Earth 4. The Enemy 5. On the Face of It 6. Memories of Childhood	

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NCC					
Common Sub.	**Unit -1** The NCC **Unit-2** (National Integration & Awarenesss)	**Unit-3** Drill **Unit-4** (Weapon Training) **Unit-5** (Personality Development & Leadership)	Unit-1, 2, 3, 4, 5 **Unit-6** (Disaster Management & Civil Affairs & community Development) **Unit-8** (Health & Hygiene) **Unit-9** (Adventure & obstacle Training) **Unit-10** (Environmental Awareness & Conservation		**Unit-** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
Special Sub.	**Unit -1** Armed Forces	**Unit-2** (Map Reading)	**Unit-3** (Field Craft & Battle Craft)	**Unit-4** (Military History) **Unit-5** (Communication)	Unit-1, 2, 3, 4, 5 Complete syllabus

C.S	**Unit I: Computational Thinking and Programming – 2** ● Revision of Python topics covered in Class XI. **Unit III: Database Management** ● Database concepts: introduction to database concepts and its need ● Relational data model: relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key) ● **Structured Query Language:** introduction, Data Definition Language and Data Manipulation Language, data type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key), create database, use database, show databases, drop database, show tables, create table, describe table, alter table (add and remove an attribute, add and remove primary key), drop table, insert, delete, select, operators (mathematical, relational and logical), aliasing, distinct clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command, aggregate functions (max, min, avg, sum, count), group by, having clause, joins: cartesian product on two tables, equi-join and natural join	*** Topics Covered in PA- I 1st (30 % Weightage)** ● **Functions:** Types of function (built-in functions, functions defined in module, user defined functions), creating user defined function, arguments and parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope). ● **Exception Handling:** Introduction, handling exceptions using try-except-finally blocks	**Topics Covered in PA-1.** ● **File Handling** : Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths ● **Text file:** opening a text file, text file open modes (r, r+, w, w+, a, a+), closing a text file, opening a file using with clause, writing/appending data to a text file using write() and writelines(), reading from a text file using read(), readline() and readlines(), seek and tell methods, manipulation of data in a text file ● **Binary file:** basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump() and load() method, read, write/create, search, append and update operations in a binary file ● **CSV file:** import csv module, open / close csv file, write into a csv file using writer(),writerow(),writerows() and read from a csv file using reader() ● **Data Structure:** Stack, operations on stack (push & pop), implementation of stack using list.	● **Interface of python with an SQL database:** connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using connect(), cursor(), execute(), commit(), fetchone(), fetchall(), rowcount, creating database connectivity applications, use of %s format specifier or format() to perform queries **Unit II: Computer Networks** ● **Evolution of networking:** introduction to computer networks, evolution of networking (ARPANET, NSFNET, INTERNET) ● **Data communication terminologies:** concept of communication, components of data communication (sender,receiver, message, communication media, protocols), measuring capacity of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuit switching, Packet switching) ● **Transmission media:** Wired communication media (Twisted pair cable, Co-axial cable, Fiber-optic cable), Wireless media (Radio waves, Micro waves, Infrared waves) ● **Network devices** (Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card) ● **Network topologies and Network types:** types of networks (PAN, LAN, MAN, WAN), networking topologies (Bus, Star, Tree) ● **Network protocol:** HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP ● **Introduction to web services:** WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML), domain names, URL, website, web browser, web servers, web hosting	Pre-Board

NAME & SIGNATURE OF CLASS TEACHER :