

D.A.V. PUBLIC SCHOOL, PRATAP VIHAR, GHAZIABAD

ACADEMIC PLANNER (2020-21)

CLASS XII, BUSINESS STUDIES

<u>MONTH</u>	<u>TOPIC</u>
April	<ul style="list-style-type: none">• Unit 11: Marketing Management• Unit 12: Consumer Protection
May	<ul style="list-style-type: none">• Unit 1: Nature & Significance of Management• Unit 2: Principles of Management• Unit 3: Business Environment
June	Summer Vacation
July	<ul style="list-style-type: none">• Unit 9: Financial Management• Unit 10: Financial Market
August	<ul style="list-style-type: none">• Unit 4: Planning
September	<u>HALF YEARLY EXAMINATION</u>
October	<ul style="list-style-type: none">• Unit 5: Organising• Unit 6: Staffing
November	<ul style="list-style-type: none">• Unit 7: Directing• Unit 8: controlling
December January	Revision for pre board examination Revision work
February	<u>ANNUAL EXAMINATION</u>

Book Prescribed: NCERT

Rashmi Arora

PGT(Commerce)

D.A.V. PUBLIC SCHOOL, PRATAP VIHAR, GHAZIABAD

ACADEMIC PLANNER (2020-21)

CLASS XII, ACCOUNTANCY

<u>MONTH</u>	<u>TOPIC</u>
April	<ul style="list-style-type: none">● Unit 4: Analysis of Financial Statements<ul style="list-style-type: none">➤ Financial statement of the company➤ Financial statement Analysis➤ Tools of Financial statement Analysis<ul style="list-style-type: none">❖ Comparative & Common Size Statement❖ Ratio Analysis
May	<ul style="list-style-type: none">● Unit 5: Cash Flow Statement● Unit 1: Financial Statement of Not for Profit Organisations
June	Summer Vacation
July	<ul style="list-style-type: none">● Unit2:Accounting for Partnership Firms<ul style="list-style-type: none">➤ Fundamentals of Accounting➤ Valuation of Goodwill➤ Reconstitution of Partnership:<ul style="list-style-type: none">❖ Change in profit sharing ratio
August	<ul style="list-style-type: none">● Unit 2: Accounting for Partnership firms<ul style="list-style-type: none">➤ Admission of a Partner➤ Retirement and Death of a partner
September	<u>HALF YEARLY EXAMINATION</u>
October	<ul style="list-style-type: none">● Unit 2:Accounting for Partnership Firms:<ul style="list-style-type: none">➤ Dissolution of Partnership firms● Unit 3: Accounting for Companies: Share Capital
November	<ul style="list-style-type: none">● Unit 3:Accounting for Companies:<ul style="list-style-type: none">➤ Issue of Debentures➤ Redemption of Debentures
December	Revision for pre board examination
January	Revision work
February	<u>ANNUAL EXAMINATION</u>

Book Prescribed: NCERT & T.S. GREWAL

DAV PUBLIC SCHOOL PRATAP VIHAR GHAZIABAD

CLASS :XII SUBJECT : BIOLOGY

ANNUAL PLANNER AND SYLLABUS(2020-21)

<u>MONTH</u>	<u>TOPICS</u>	<u>SUB-TOPICS</u>	<u>PRACTICALS</u>
APRIL	<ul style="list-style-type: none">• Reproduction in organisms• Sexual Reproduction in flowering Plants	Modes of Reproduction, Asexual and sexual, Structure of flower, development of male and female gametes, pollination, Fertilisation, fruit and seed, Male	1. To study pollen germination.
MAY	<ul style="list-style-type: none">• Human Reproduction• Principles of inheritance• Molecular basis of inheritance	and Female Reproductive system of Human Mendel's experiment, inheritance of one and two gene, laws of inheritance, sex determination, Genetic disorder, structure of DNA, Transcription, Translation, Genetic code, lac operon model, HGP, DNA Fingerprinting, pedigree analysis.	1. To study gametogenesis through T.S. of ovary and T.S. of testis. 2. To study blastula.
JULY	<ul style="list-style-type: none">• Human Health and Diseases.• Strategies for enhancement in food production.• Reproductive Health	Infectious diseases, basic Concepts of immunology, Vaccines, Cancer, AIDS, Drug and alcohol abuse, Plant and animal breeding, Methods to prevent fertilization and STD's, ART.	1. To study disease causing organisms: ascaris, plasmodium And Entamoeba histolytica. 2. To study pedigree charts of rolling tongue, widow's peak and colour blindness.
AUGUST	<ul style="list-style-type: none">• Evolution• Microbes in human welfare• Principles of biotechnology• Applications of biotechnology	Origin of life, biological evolution, evidences of evolution, Darwin's theory, Mechanism of evolution, Use of microbes in household food processing, industries, rDNA Technology, Application of biotechnology in health and agriculture,	1. To study living organisms in pond water. 2. To prepare temporary mount of onion root tip to study mitosis.

		biopatent and agriculture, Sewage treatment, and medicines. biopiracy	
September (Half yearly Exam)	1.Reproduction in organisms 2. Reproduction in flowering plants. 3.Principles of inheritance 4.Molecular basis of inheritance 5.Human Health and Diseases. 6.Strategies for enhancement in food production. 7.Reproductive Health 8.Evolution 9.Microbes in human welfare 10.Principles of biotechnology 11.Applications of biotechnology		
OCTOBER	<ul style="list-style-type: none"> • Organisms and population. • Ecosystem • Biodiversity and its conservation. 	Habitat and niche of organisms, population attributes, population interactions, Ecosystem: productivity, energy flow, decomposition and nutrient cycling, patterns of biodiversity, its importance, cause of biodiversity loss,	1. To study xerophytic adaptation. 2. To study aquatic adaptation. 3.To study the effect of temperatures on the activity of salivary amylase. 4. To study water holding capacity of two different soils.
NOVEMBER	Environmental issues.	Air pollution and its control, Water pollution and its control, Radioactive pollution, solid waste management, green house effect and ozone depletion.	1. To study wind and insect pollinated flower . 2. Isolation of DNA from given plant material.
DECEMBER(PRE-BORARD EXAM)	REVISION OF WHOLE SYLLABUS		
JANUARY	REVISION OF WHOLE SYLLABUS AND ANNUAL PRACTICALS		
FEBRUARY	REVISION OF WHOLE SYLLABUS		

PRESCRIBED BOOK: NCERT Text Book of Biology

SHAMMI CHHABRA

PGT BIOLOGY

MR. SANJAY SINGH

HOD SCIENCE

DAV PUBLIC SCHOOL (10+2), PRATAP VIHAR, GHAZIABAD

ACADEMIC PLANNER (2020-21)

CLASS – XII

SUBJECT- CHEMISTRY

Prescribed Book:- NCERT

MONTH	TOPIC	SUBTOPIC	ACTIVITY
April	solutions Chemistry in everydaylife	Types of solution <ul style="list-style-type: none">• Concentration of solution• Solubility of gas in liquid• Solubility of solid and liquid in liquid• Colligative properties• Van't Hoff factor• Abnormal molar mass Classification of drugs <ul style="list-style-type: none">• Therapeutic action of drug General trends	
May	Biomolecules General principle and process of isolation of elements Surface chemistry	.Bio molecules <ul style="list-style-type: none">• Carbohydrates• proteins enzymes and nucleic acid General principle and process of isolation of elements <ul style="list-style-type: none">• Steps involved in metallurgy• Refining methods Surface Chemistry <ul style="list-style-type: none">• Adsorption• absorption• Classification and properties of colloids	<ul style="list-style-type: none">• Preparation of standard solution of F.A.S• Preparation of standard solution of oxalic acid• Volumetric titration
June	SUMMER VACATION WILL HELD		
July		<ul style="list-style-type: none">•	<ul style="list-style-type: none">• Volumetric analysis

	<p>Haloalkane and Haloarene</p> <p>Alcohols Phenols and ethers</p> <p>Aldehydes ketones and Carboxylic acid</p> <p>Organic compounds containing nitrogen</p>	<ul style="list-style-type: none"> • Classification • Preparation of Alcohols phenols and ethers and • Physical and Chemical properties of Alcohols phenols and ethers • Preparation and properties of compounds <ul style="list-style-type: none"> • Preparation of Aldehydes, ketones and carboxylic acid • Physical and chemical properties of Aldehydes, ketones and carboxylic acid • Preparation of Amines and Diazonium salt • Physical and chemical properties of Amines and Diazonium salt 	
August	<p>Polymers</p> <p>Chemical kinetics</p>	<ul style="list-style-type: none"> • Classification of polymer • Preparation and uses of polymers <p>Mechanism of polymerisation Rate of reaction and factors which affect</p> <ul style="list-style-type: none"> • Zero order reaction • First order reaction • Rate constant • Dependence of reaction rate on Temperature • Effect of catalyst • Collision theory 	<ul style="list-style-type: none"> • Salt analysis
September	Half Yearly Exam WILL HELD		

October	Solid state D and F Block elements	Types of solid Calculation involving density Electrical properties of solid Magnetic properties of solid Conducting properties <ul style="list-style-type: none"> • Preparation of compounds • Properties of lanthanoids • Properties of actinoids 	<ul style="list-style-type: none"> • Functional group detection • chromatography
November	P Block elements Coordination compounds	<ul style="list-style-type: none"> • Preparation of compounds And properties of group 15 ,16,17 and 18 • Theories of coordination compound • Isomerism in coordination compound • IUPAC nomenclature 	<ul style="list-style-type: none"> • Preparation of colloids • Chemical kinetics
December	Revision of p block, D and F block elements Physical chemistry	Revision of physical and inorganic chemistry	<ul style="list-style-type: none"> • Revision of salt analysis • Revision of titration
January	REVISION	<ul style="list-style-type: none"> • Structures • Reasoning questions • Numerical 	<ul style="list-style-type: none"> • Revision of content based experiment
February	Pre Board WILL HELD		
March			

D.A.V Public School, Pratap Vihar, Ghaziabad

Academic Planner Class-XII (2020-21)

Subject: Computer Science with Python
Prescribed book – Preeti Arora

Month	Topic/Unit	Subtopic	Lab Activity
March	UNIT3 Data Management – 2 (20 Theory + 20 Practical)	REVIEW(Chapter 1): Revision of the basics of Python	Program of Python with loops and conditional statements.
		Data Management (DM-2) (Chapter 10) SQL commands: aggregation functions in SQL , Sorting in SQL-order by, group by-having clause	Programs of Python with strings, list dictionary and tuple.
		Interface Python with an SQL database (Chapter 9): Python SQL connectivity, Creating Cursor objects,	SQL Queries using order by and Aggregated function, SQL Queries using group by and having,
April	UNIT3 Data Management – 2 (20 Theory + 20 Practical) UNIT 1: Programming and Computational Thinking (80 Theory + 70 Practical)	Interface Python with an SQL database (Chapter 9): creating database, closing cursor and connection, operating on a table.	Integrate SQL with Python by importing the MySQL module
		Django based web application (chapter12): Django Installation, Web servers, GET and POST methods-minimal django based web Application that parses a GET, minimal django based web Application that parses a POST,Working with Flat files and CSV files	Write a Django based web server to parse a user request (POST) Write a Django based web server to parse a user request (POST) and write it to flat file.
		Functions(chapter 2): scope of variable, parameter & Argument passing	Write a Django based web server to parse a user request (POST) and write it to CSV file, Read from CSV files

	PERIODIC TEST-1	Syllabus: Chapter 1,10,9,12	
May	UNIT 1: Programming and Computational Thinking (80 Theory + 70 Practical)	Functions(chapter 2): mutable/immutable properties of data objects, , pass arrays to functions, return values, functions using libraries: mathematical, and string functions	Read a file line by line and print it. Remove all the lines that contain the character `a' in a file and write it to another file.
July	UNIT 1: Programming and Computational Thinking (80 Theory + 70 Practical)	Using Python libraries(chapter 3): create and import Python libraries, Namespaces, name Resolution, Packages, locating Modules File handling(chapter 4): open and close a file, read, write, and append to a file, standard input, output, and error streams, relative and absolute paths. Recursion(chapter 2): simple algorithms with recursion: factorial, Fibonacci numbers; recursion on arrays: binary search). Idea of efficiency(Chapter 5): performance defined as inversely proportional to the wall clock time, count the number of operations a piece of code is performing, and measure the time taken by a program. Example: take two different programs for the same problem, and understand how the efficient one takes less time.	Write a Python function sin(x, n) to calculate the value of sin(x) using its Taylor series expansion up to n terms. Compare the values of sin(x) for different values of n with the correct value. Write a random number generator that generates random numbers between 1 and 6 (simulates a dice). Write a recursive code to find the sum of all elements of a list. Write a recursive code to compute the nth Fibonacci number Recursively find the factorial of a natural number.

August	<p align="center">UNIT 1: Programming and Computational Thinking (80 Theory + 70 Practical)</p>	<p>Data-structures(chapter 6): lists, stacks- using list-creating, adding elements, deleting element traversing, queues.- using list-creating, adding elements, deleting element traversing.,</p>	<p>Write a recursive Python program to test if a string is a palindrome or not.</p> <p>Write a Python program to implement a stack and queue using a list data-structure.</p>
		<p>Data visualization using Pyplot(Chapter 7):Matplotlib,Numpy,Types of visualizations, line chart, pie chart, and bar chart.</p>	
		<p>Structure of a network(chapter 8): Types of networks- local area and wide area (web and internet),PAN, new technologies such as cloud and IoT, public vs. private cloud, wired and wireless networks; concept of a client and server.</p>	<p>Write a Python program to plot the function $y = x^2$ using the pyplot or matplotlib libraries.</p>
		<p>Network devices(chapter 8): such as a NIC, switch, hub, router, repeater, gateway, and access point.</p>	
August	<p align="center">UNIT 2: Computer Networks (CN) (30 Theory + 10 Practical)</p>	<p>Network stack(chapter 8): amplitude and frequency modulation, collision in wireless networks, error checking, and the notion of a MAC address, main idea of routing.</p>	<p>Create a graphical application that accepts user inputs, performs some operation on them, and then writes the output on the screen. For example, write a small calculator.</p>

September	UNIT 2: Computer Networks (CN) (30 Theory + 10 Practical)	IP addresses(chapter 8): (v4 and v6), routing table, router, DNS, and web URLs	Use the tkinter library. Open a webpage using the urllib library. Compute EMIs for a loan using the numpy or scipy libraries.
		Basic network tools(chapter 8): traceroute, ping, ipconfig, nslookup, whois, speed-test.	
		TCP(chapter 8): basic idea of retransmission, and rate modulation when there is congestion (analogy to a road network), Protocols: 2G, 3G, 4G, WiFi. What makes a protocol have a higher bandwidth?	
		REVISION	
	HALF YEARLY EXAM	Syllabus: Chapter 2,3,4,5,6,7,9,10	
October	UNIT 2: Computer Networks (CN) (30 Theory + 10 Practical)	Application layer(chapter 8)r: HTTP (basic idea), working of email, secure communication: encryption and certificates (HTTPS), network applications: remote desktop, remote login, HTTP, FTP, SCP, SSH, POP/IMAP, SMTP, VoIP, NFC (Chapter 9)	Take a sample of 10 phishing e-mails and find the most common words.
	UNIT 4: Society, Law and Ethics (SLE-2) (10 Theory)	Society, Law and Ethics (SLE-): (Chapter 11) Intellectual property rights, plagiarism, digital rights management, and licensing (Creative Commons, GPL and Apache), open source, open data, privacy.	

November	<p style="text-align: center;">UNIT 4: Society, Law and Ethics (SLE- 2) (10 Theory)</p>	<p>(Chapter 11) Privacy laws, fraud; cyber-crime- phishing, illegal downloads, child pornography, scams; cyber forensics, IT Act, 2000.</p> <p>Technology and society: understanding of societal issues and cultural changes induced by technology.</p> <p>E-waste management: proper disposal of used electronic gadgets. • Identity theft, unique ids, and biometrics.</p> <p>Gender and disability issues while teaching and using computers</p>	Practice Programs
	PERIODIC TEST- 2	Syllabus: Chapter 1,2,6,8,11	
December	Revision		
January	PREBOARD	Syllabus: All four Units	
February	Revision		
March	Revision		

D.A.V. PUBLIC SCHOOL, PRATAP VIHAR, GHAZIABAD

ACADEMIC PLANNER(2020-2021)
CLASS: XII ECONOMICS

<u>MONTH</u>	<u>TOPIC</u>	<u>SUB TOPIC(S)</u>
April	Part A: Introductory macroeconomics ❖ Unit 2: money and banking ❖ Unit 4: Government budget and the economy	❖ Money-its meaning and functions ❖ Supply of money ❖ Money creation by the commercial banking system ❖ Central and its functions ❖ Government budget- meaning, objectives and components ❖ Classification of receipts- revenue receipts and capital receipts: classification of expenditure-revenue expenditure and capital expenditure ❖ Measures of government deficit
May	❖ Unit 3 Determination of income and employment	❖ Aggregates demand and its components ❖ Propensity to consume and propensity to save ❖ Short run equilibrium output; investment multiplier and its mechanism ❖ Meaning of full employment and involuntary

	<ul style="list-style-type: none"> ❖ Unit 5 balance of payments <p>Unit 1: National income and related aggregates</p>	<p>unemployment</p> <ul style="list-style-type: none"> ❖ Problem of excess demand and deficient demand: measures to correct them ❖ Balance of payments account-meaning and components; balance of payments deficit-meaning ❖ Foreign exchange rate-meaning of fixed and flexible rates and managed floating ❖ Determination of exchange rate in a free market ❖ Some basic concepts: ❖ Circular flow of income; methods of calculating national income ❖ Aggregates to national income: GNP, NNP, GDPmp, NDPmp, GDPfc, NDPfc,
July	<ul style="list-style-type: none"> ❖ Unit 1: National income and related aggregates <p>Unit -6</p> <ul style="list-style-type: none"> ❖ : Indian economic development 	<ul style="list-style-type: none"> ❖ NNP, GDPmp, NDPmp, GDPfc, NDPfc, Real and Nominal GDP. ❖ GDP and welfare ❖ ❖ State of Indian economy on the eve of independence
August	<ul style="list-style-type: none"> ❖ (1947-90) and economic reforms since 1991 	<ul style="list-style-type: none"> ❖ Common goals of five year plans ❖ Economic reforms since 1991

September	Revision	Half yearly exam
October	Unit-7 current challenges facing Indian economy Poverty Rural development Human capital formation	<ul style="list-style-type: none"> ❖ Programmes of poverty alleviation ❖ Credit and marketing ❖ Role of human capital formation
November	Employment Infrastructure Sustainable development ❖ Unit -8: Development experience of India	<ul style="list-style-type: none"> ❖ Formal and informal ,growth and other issues ❖ Meaning and types of infrastructure ❖ Meaning . effects of economic development on resoures and environment including global warming
December		❖ 1 ST Preboard
January		2 nd Preboard
February		Revision
March		Board exams

DAV PUBLIC SCHOOL PRATAP VIHAR GHAZIABAD

ACADEMIC PLANNER & SYLLABUS S(2020-21)

CLASS - XII SUB - ENGLISH CORE

Prose- Flamingo

Supplementary Reader - Vistas

SR.NO	MONTH	Syllabus
1.	APRIL	Reading -Comprehension Passage, Writing Advertisement/ Letter – (Editorial/ Business)Placing Order, Enquiry/ Job Application Prose Ch-1 The Last Lesson Ch-2 Lost Spring
2.	MAY	Reading & Writing Notice, Advertisement/ Letter Formal(Official) Article/ Speech writing Prose- Ch. 3. Deep Water Poetry P-1 My Mother at Sixty Six P-2 An Elementary School Classroom Vistas – Ch – 1 The Third Level Ch-2 The Tiger King
	PERIODIC TEST 1	Reading & Writing & Literature + All syllabus covered till May
3.	JULY	Reading & Writing - Comprehension Passage ,Note Making, Display Advertisement, Article , Speech, Debate ,Report, Prose- Ch- 4 The Rattrap Poem – 3 Keeping Quiet Vistas - Ch – 3. Journey to the End of the World Ch – 4 The Enemy
4.	AUGUST	Reading & Writing – Posters/ Formal Letters/Article/ Speech/ Debate Report Writing REVISION of all syllabus
5.	SEPTEMBER /REVISION/ PERIODIC TEST 2/ HALFYEARLY	REVISION and Half Yearly Exams
6.	OCTOBER	Reading & Writing - Comprehension passage, Note Making, Prose – Ch – 5 Indigo Ch- 6 Poets & Pancakes Poetry – P – 4 A Thing Of Beauty Vistas – Ch- 5 Should Wizard Hit Mommy Ch – 6 – On the Face Of It
7.	NOVEMBER	Reading & Writing - Note Making, Article/ Speech etc. Prose – Ch – 7. The Interview Ch – 8. Going Places Poetry – P – 5 A Road side Stand P – 6 Aunt Jennifer’s Tigers Vistas – Ch – 7 – Evans Tries O – Level Ch – 8 – Memories of Childhood
	PERIODIC TEST 3	Comprehension Passage Note Making + All Syllabus covered In Month Of October & November
8.	DECEMBER	Comprehension Passage, Note Making, Article/ Debate Revision & Pre Board I
9.	JANUARY	Revision & Pre Board II

10.	FEBUARY	Revision of Whole Syllabus
11.	MARCH	Final Exams

D.A.V. PUBLIC SCHOOL

PRATAP VIHAR, GHAZIABAD

CLASS-XII-SUB-MASS MEDIA

ACADEMIC PLANNER – 2020-21

1. UNIT TEST - 1

1. UNIT - 1. (April- May)

2. Selling / Marketing/Exhibiting a product Through Advertising.
3. Chapter - 2. Functions Of Advertising
4. Chapter - 3. Types Of Advertising
5. Chapter - 4. Form Of Advertising
6. Employability Skills
7. Chapter 1. Communication Skills.

JUNE- SUMMER VACATIONS

2. UNIT - 2. (July- August)

3. Introduction To The Production Process
4. Chapter-1. Film
5. Chapter- 2. Television
6. Chapter-3. Print

7. Chapter- 4. Radio
8. Chapter-5 Internet
9. Employability Skills
10. Chapter-2. ICT skills

SEPTEMBER HALF YEARLY EXAMINATION

11. Unit-Test-3.(October)
12. UNIT-3. NEW MEDIA
13. Employability Skills- Self Management Skills
14. Unit-4. Creative contribution of the Key People
Chapter 1. Film

Month - November

Chapter-2. Television In Production Process

Chapter-3. Print - Analyzes of Newspaper

Chapter-4. Radio- Recording For Radio

Chapter-5. Internet.

In DECEMBER - Revision for Pre Board and Practical Exams.

In January - pre boards and Practicals

In February Final Examination.

Prescribed Book- N.C.E.R.T. text book of Mass-Media making of portfolio & documentary

NOOR SARASWAT

PGT (MASS MEDIA)

D.A.V. PUBLIC SCHOOL

PRATAP VIHAR, GHAZIABAD

ACADEMIC PLANNER

CLASS XII (2020 – 2021)

MATHEMATICS

MONTH	TOPICS
APRIL	Ch-1 Relation and Function Ch-2 Inverse trigonometric functions Ch-3 Matrices Ch-4 Determinants
MAY	Ch-5 Continuity and differentiability Ch-12 Linear programming Ch-6 Application of derivatives
JULY	Ch-6 Application of derivatives (Continued) Ch- 7 Integrals
AUGUST	Ch- 8 Application of Integrals Revision of Half yearly syllabus
SEPTEMBER	HAFYEARLY EXAMINATION

OCTOBER	Ch-9 Differential Equations Ch-10 Vector Algebra Ch-11 3-D Geometry
NOVEMBER	Ch-13 Probability Revision and Preboard 1
DECEMBER	Revision (WHOLE SYLLABUS)
JANUARY PREBOARD II EXAM	whole syllabus
FEBRUARY	Revision

DAV Public school, Pratap Vihar Ghaziabad

Academic Planner (2020–21)

Class - XII

Subject – Physical Education

S.NO.	Month	Chapter
1.	APRIL	Unit -1: Planning in Sports
2.	MAY	Unit-2: Sports and Nutrition
3.	JULY	Unit-3: Yoga and Life style Unit-4: Physical Education and sports for CWSN (Divyang)
4.	AUGUST	Unit-5: Children and women in sports Unit-6: Test and Measurements in Sports
5.	SEPTEMBER	Revision of SA-1, or Half yearly (unit-1 to unit-6)
6.	OCTOBER	Unit-7: Physiology and injuries in Sports.
7.	NOVEMBER	Unit-8: Bio mechanics & Sports
8.	DECEMBER	Unit-9: Psychology & Sports Unit-10: Training in Sports
9.	JANUARY	Revision & (PRE-BOARD)

DAV Public School, PratapVihar Ghaziabad
Academic Planner (2020–21)
Class - XII
Subject – Work Experience

S.NO	ACTIVITY
TERM1	<ol style="list-style-type: none">1. List the steps to form committees for tournaments2. Tree Plantation
TERM 2	<ol style="list-style-type: none">1. Preparation and use to First Aid Box2. Effects of tobacco and Alcohol in human body

DAV PUBLIC SCHOOL (10+2), PRATAP VIHAR, GHAZIABAD

ACADEMIC PLANNER (2020-21)

CLASS – XII

SUBJECT- PHYSICS

**Prescribed Book: - Physics Textbook Part-I (NCERT) &
Physics Textbook Part-II (NCERT)**

MONTH	TOPIC	SUBTOPIC	PRACTICAL
April	1. Electric Charges and Fields 2. Electrostatics potential and Capacitance	Conservation of electric charges, Electric field, electric dipole, Electric flux, Gauss theorem, Equipotential surfaces ,Conductors and Insulators, Dielectric and Electrical polerisation, Capacitance and Capacitors, Van de graaff generator	<ul style="list-style-type: none">• To find the resistance of a wire using meter bridge and also determine the specific resistance.• To determine resistance per cm of a wire by plotting a graph b/w potential difference and current.
May	3. Current Electricity	Electric current, Ohm's Law, V-I characteristics, Temperature dependence of resistance, emf of a cell, Kirchhoff's Law and its applications, Potentiometer, Internal resistance of a c ell	<ul style="list-style-type: none">• To verify the laws of combination (series and parallel) of resistances using a meter bridge.
June	SUMMER VACATION WILL HELD		
July	4. Moving charges and Magnetism 5. Magnetism and Matter	Oersted Experiment, Biot Savart Law, Ampere's law and its application, Straight and Toloidal Solenoids, Moving coil galvanometer, Magnetic dipole, Magnetic field intensity, Torque on magnetic field, Electromagnets	<ul style="list-style-type: none">• To compare the emf of two given primary cells using potentiometer.• To determine the internal resistance of a primary cell using potentiometer.

	6. Electromagnetic Induction	Electromagnetic induction, Faraday's law	
August	6. Electromagnetic Induction 7. Alternating Current 8. Electromagnetic Waves	Lenz's law, Eddy currents, Self and mutual induction, AC, reactance & impedance, LC oscillations, LCR series, AC generator and transformer, Transverse nature of Electromagnetic Waves, Electromagnetic Spectrum and their uses	<ul style="list-style-type: none"> • To determine the resistance of galvanometer by half deflection method and to find its figure of merit. • To find the frequency of AC mains with a sonometer.
September	Half Yearly Examination will held		
October	9. Ray Optics and Optical Instruments 10. Wave Optics 11. Dual Nature of Radiation and Matter	Reflection & Refraction of Light, Mirror formula, TIR, Lens formula, Scattering of light, Human eye, Microscopes and astronomical telescopes Wave front & Huygen's principle, Interference young's double slit expt, diffraction, Polarisation Photoelectric effect, Hertz & Lenard's observations, Matter waves	<ul style="list-style-type: none"> • To find the value of v for different values of u in case of a concave mirror & to find the focal length. • To find the focal length of a convex mirror using a convex lens. • To find the convex lens by plotting graphs b/w u and v. • To find the focal length of a concave lens using a convex lens.
November	12. Atoms 13. Nuclei 14. Semiconductor Electronics	Alpha particle, Rutherford's model, Bohr model, Energy levels Composition and size of nucleus, alpha, beta, gamma particles, Nuclear fission & fusion Energy bands, Semiconductor diode, LED, Zener diode, Transistor, Logic gates, Transistor as a switch	<ul style="list-style-type: none"> • To determine the angle of minimum deviation and refractive index of a given prism. • To find the refractive index of a liquid by using concave mirror. • To find the refractive index of a liquid by using convex lens & plane mirror. • To draw I-V characteristics curve for a p-n junction in forward & reverse bias.

December	15. Communication Systems	Elements of Communication Systems, Bandwidth, Propagation of EMW, amplitude-Modulated wave	<ul style="list-style-type: none"> To draw I-V characteristics curve of a zener diode & determine its reverse breakdown voltage. To study the characteristics of a common emitter n-p-n transistor.
January	REVISION & PREBOARD EXAMINATION – I WILL HELD		
February	PRACTICALS WILL HELD		
March	CBSE BOARD EXAMINATION WILL HELD		

Weight-age to Learning Objectives:-

UNIT	CHAPTER/TOPIC	MARKS
I	Electrostatics 1. Electric Charges and Fields 2. Electrostatics potential and Capacitance	16
II	Current Electricity 3. Current Electricity	
III	Magnetic Effects of Current and Magnetism 4. Moving charges and Magnetism 5. Magnetism and Matter	17
IV	Electromagnetic Induction & Alternating Current 6. Electromagnetic Induction 7. Alternating Current	
V	Electromagnetic Waves 8. Electromagnetic Waves	18
VI	Optics 9. Ray Optics and Optical Instruments 10. Wave Optics	
VII	Dual Nature of Matter 11. Dual Nature of Radiation and Matter	12
VIII	Atoms & Nuclei 12. Atoms 13. Nuclei	
IX	Electronic Devices	07

	14. Semiconductor Electronics	
	Total	70

Unit test- 1 = 50 marks

Half Yearly Exam = 70 marks

Preboard-1 = 70 marks

Pre Board Exam = 70 marks