



GATEWAY
INTERNATIONAL SCHOOL

GRADE XII SCIENCE

ANNUAL LEARNING
PROGRESSION



GATEWAY INTERNATIONAL SCHOOL

ANNUAL PLANNER

Session: 2023-24

Class : XII

Subject : Computer Science (083)

S. No.	Month	Unit/Chapter/Topic	Practical/Activity	Syllabus Internal Assessment / Half Yearly/ Annual
1	April	UNIT 1: Chapter1- python revision tour 1 Chapter2- python revision tour 2 Chapter3- working with functions	Programs based on python fundamentals and functions	
2	May	Chapter3- working with functions continue... Chapter4- file handling	Program based on built-in , user defined functions and text file handling	Internal Assessment 1 Ch-1,2,3
3	June	Summer break (Prepare practical file on some topics (programs) as given in list)		
4	July	Chapter4- file handling continue...	Programs based on binary and csv file handling	
5	August	Chapter5- data structure using stack UNIT 2 : Chapter6- computer networks 1	Practice of all stack based questions using push , pop operations	Internal Assessment 2 Ch-4,5
6	September	Revision & exam		Half Yearly (written) Ch-1,2,3,4,5,6 Half Yearly (practical) Ch-1 to 4
7	October	Chapter 7- computer networks 2 UNIT 3: Chapter8 : MYSQL revision tour	To make database and relations in MYSQL using all commands	
8	November	Chapter9: More on SQL Chapter 10: Interface with python	Practice on queries of MYSQL and join Operations , connectivity of python to database using programming code	
9	December	Revision & pre board 1 exams		
10	January	Pre board 2 exams		
11	February			
12	March	FINAL EXAMS		



GATEWAY INTERNATIONAL SCHOOL
ANNUAL PLANNER

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Class: XII

Subject : Chemistry

S. No	Month	Unit/ Chapter/ Topic	Practical/Activity	Syllabus Internal Assessment / Half Yearly/ Annual
1.	April	Chapter-1 Solution Chapter-2 Electrochemistry (Half)	1. Separation of mixture of two ink by chromatography. 2.Preparation of standard solution of some salt.	-
2.	May	Chapter-2 Electrochemistry (Half) Chapter-3 Chemical Kinetics	1.Construction of Denial's cell. 2. An electrolytic cell will be constructed. 3. To study the variation of cell potential with the change in concentration in Denial's cell. 4. To study the effect of temperature and concentration on the rate of reaction between Thiosulfate and HCl.	<u>IA-I Syllabus:</u> Chapter- 1 and 2
3.	July	Chapter-4 d & f block elements. Chapter-5 Coordination compounds.	1.Titration of the KMnO ₄ vs. Mohr's salt /oxalic acid. 2. Salt analysis	<u>IA-IISyllabus:</u> Chapter- 3 and 4
4.	August	Chapter-6 Haloalkane and haloarene. Chapter-7 Alcohol, phenol and ether (half)	1. To prepare the colloidal solution of Gum, egg albumin and star Chapter- 2. Salt analysis.	
5.	September	Chapter-7 Alcohol, phenol and ether (half)	1. Salt analysis.	<u>Half Yearly Syllabus:</u> Chapter- 2, 3, 4, 5, 6
6.	October	Chapter-8 Aldehyde, ketone and carboxylic acid. Chapter-9 Amines	1. Test for the functional group in organic compounds	
7.	November	Chapter-10 Biomolecules.	1. Preparation of double salt.	<u>Pre-Board-1</u> <u>Full Syllabus</u>

8.	December	Revision and Practice for Board Exam	Revision and Practice for Board Exam	<u>Pre-Board-2</u> (Full Syllabus)
9.	January	Revision and Practice for Board Exam	Revision and Practice for Board Exam	
10.	February	Revision and Practice for Board Exam	Revision and Practice for Board Exam	



GATEWAY INTERNATIONAL SCHOOL

ANNUAL PLANNER

Session: 2023-24

Class : XII

Subject : Core Maths

Month	Unit/Chapter/Topic	Activities	Syllabus Internal Assessment / Half Yearly/ Annual
April	Ch-3: Matrices Ch-4: Determinants	Activity:- 1. To relate the matrices with real life.	M.C.Q. Test and work sheet Ch- 3, 4
May	Ch-1: Relations and Functions Ch-10: vectors Ch-2: Inverse Trigonometric Functions	To verify that the relation R in the set L of all lines in a plane, defined by $R = \{(l, m) : l \perp m\}$ is symmetric but neither reflexive nor transitive. To verify that angle in a semi-circle is a right angle, using vector method.	Revision Test Syllabus: Ch-1,2 Internal Assessment 1 Ch-2,3,4
July	Ch-5:Continuity and Differentiability	To draw the graph of $1 \sin x -$, using the graph of $\sin x$ and demonstrate the concept of mirror reflection (about the line $y = x$). To find analytically the limit of a function $f(x)$ at $x = c$ and also to check the continuity of the function at that point.	
August	Ch-6:Applications of Derivatives Ch-7:Integrals(Ex-7.1 to 7.7)	To understand the concept of decreasing and increasing functions. To evaluate the definite integral $\int_0^1 (1-x) dx$ as the limit of a sum and verify it by actual integration.	Internal Assessment 2 Ch-5,6
September	Ch-7:Integrals(Ex-7.8 to misc. exercise) Ch-08: Applications of the Integrals		Half Yearly Ch-1,2,3,4,5,6,10
October	Ch-09: Differential Equations Ch-11: Three - dimensional Geometry	To measure the shortest distance the two skew lines and verify it analytically.	
November	Ch-12: Linear Programming Ch-13: Probability	Project:- To minimize the cost of food while meeting the dietary requirements of the staple food of the adolescent students of your school.	
December	Revisions		
January	EXAM		



GATEWAY INTERNATIONAL SCHOOL
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Class:XII

Subject: Physics

S.No	Month	Unit/Topics/Chapter	Activities	Syllabus IA/Half Yearly/Yearly
1.	April	Chapter-1: Electric Charges and Fields Chapter-2: Electrostatic Potential and Capacitance	P1 -To find resistance of a given wire / standard resistor using meter bridge. A1 -To measure resistance, voltage (AC/DC), current (AC) and check continuity of a given circuit using multimeter.	
2.	May	Chapter-3: Current Electricity Chapter-4: Moving Charges and Magnetism	P2 -To verify the laws of combination (series) of resistances using a metre bridge. A2 -To assemble the components of a given electrical circuit.	IA-I- Chapter-1,2
3.	July	Chapter-5: Magnetism and Matter Chapter-6: Electromagnetic Induction	P3 -To convert the given galvanometer into a voltmeter of desired range and to verify the same. A3 - 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.	IA-II- Chapter-3,4
4.	August	Chapter-7: Alternating Current Chapter-8: Electromagnetic Waves	P4 -To find the frequency of AC mains with a sonometer. A4 -To identify a diode, an	

			LED, a resistor and a capacitor from a mixed collection of such items.	
5.	September	Chapter-9: Ray Optics and Optical Instruments Chapter-14: Semiconductor Electronics: Materials, Devices and Simple Circuits	P5 -To find the focal length of a concave lens, using a convex lens. P6 -To find the focal length of a convex mirror, using a convex lens.	<u>Half Yearly Syllabus:</u> Chapter-1, 2, 3, 4, 5, 6, 7, 8
6.	October	Chapter-10: Wave Optics Chapter-11: Dual Nature of Radiation and Matter	P7 -To determine angle of minimum deviation for a given prism by plotting a graph. A5 -To observe refraction and lateral deviation of a beam of light incident obliquely on a glass slab.	
7.	November	Chapter-12: Atoms Chapter-13: Nuclei	P8 -To draw the I-V characteristic curve for a p-n junction diode in forward and reverse bias. A6 -To obtain a lens combination with the specified focal length by using two lenses from the given set of lenses.	<u>Pre-Board-1</u> (Full Syllabus)
8.	December	Revision and Practice for Practical Exam		<u>Pre-Board-2</u> <u>Full Syllabus</u>
9.	January	Revision		



GATEWAY INTERNATIONAL SCHOOL
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Class: XII

Subject: Biology

S.No	Month	Topics/Chapters	Activities	Assessment
1.	April	Ch-1 Reproduction in organisms Ch-2 Reproduction in flowering plants	Pollen tube germination	
2.	May	Ch-3 Human reproduction Ch- 4 Reproductive Health	T.S Testis T.S. Ovary T.S blastula, gastrula	<u>IA-I: Ch-1,2</u>
3.	July	Ch- 5 Principles of Inheritance and Variation	Pedigree analysis for various genetic disorders Study of Mendelian characters	<u>IA-II: Ch-3,4</u>
4.	August	Ch- 6 Molecular Basis of Inheritance Ch-7 Evolution Ch-8 Human Health and Diseases	Isolation of DNA from different sources Study specimens of different disease-causing MOs	
5.	September	Ch-9 Strategies for Enhancement in Food Production Ch-10 Microbes in Human Welfare Ch-11 Biotechnology - Principles and processes	Quadrat Method to study population density and frequency Study pH, water holding capacity, texture etc. of soil samples.	<u>Half Yearly: Ch-1,2,3,4,5,6,7</u>
6.	October	Ch-12 Biotechnology and its Application Revision and Half Yearly Examination	Spotting of different specimens	
7.	November	Ch-13 Organisms and Populations Ch-14 Ecosystem Ch-15 Biodiversity and its Conservation		
8.	November	Ch-16 Environmental Issues		<u>Pre-Board-I: Full Syllabus</u>
9.	December	Revision and Practice for Practical Exam		<u>Pre-Board-II: Full Syllabus</u>
10.	January	Revision		



GATEWAY INTERNATIONAL SCHOOL

ANNUAL PLANNER

Session: (2023-2024)

Class- XII

Subject-Psychology

MONTH	CHAPTER	PRACTICAL	ASSESSMENT
APRIL	CH1: VARIATIONS IN PSYCHOLOGICAL ATTRIBUTES		
MAY	CH2: SELF AND PERSONALITY		IA 1 : CH 1
JULY	CH3: MEETING LIFE CHALLENGES CH 4 : PSYCHOLOGICAL DISORDERS	INTELLIGENCE PERSONALITY	REVISION TEST : CH 1, CH 2
AUGUST	CH5: THERAPEUTIC APPROACHES	APTITUDE	IA2: CH3, CH4, CH5
SEPTEMBER	CH6: ATTITUDE AND SOCIAL COGNITION	ADJUSTMENT	HALF YEARLY: CH1, CH2, CH 3, CH4, CH5
OCTOBER	CH7: SOCIAL INFLUENCE AND GROUP PROCESSES	SELF CONCEPT	
NOVEMBER	CH 7 : SOCIAL INFLUENCE AND GROUP PROCESSES		REVISION TEST: CH6, CH 7
DECEMBER			PRE-BOARD I
JANUARY			PRE-BOARD II



GATEWAY INTERNATIONAL SCHOOL
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Session: (2023-2024)

Class- XII

Subject : Physical Education

S.No.	Month	Unit/Chapter/Topic	Activity	Internal Assessment/Half Yearly/Annual
1	April	Unit:1 Management of sporting events Planning organising Staffing, directing and controlling. Various committees Fixtures and its procedure.	Knockout Fixtures All tournament fixtures test League method test.	IA -1 : UNIT : 1,2
2	May	Unit 2: Children & women insports Common postural deformities Special consideration Female athletes triad	Lordosis, Kyphosis and scoliosis diagram	
3	June	Summer break		
4	July	Unit 3: Yoga as preventive measure for lifestyle disease Obesity, diabetes, asthma, hypertension	Yoga activities and test.	
5	August	Unit 4: Physical education and sports for CWSN-Divyang organizations Promoting disability sports Paralympic, deaflympics Strategies to make physical activities.	Physical activities	
6	September	Unit 5: Sports and nutrition Concept of balance diet and nutrition. Macro and micro nutrition on food sources	Lesson test	IA-2 : UNIT 3,4 Half yearly exam : unit 1 to 5

and funct on.
**Nutritive & non nutrit
 ve components of diet**
Revision half yearly

7	October	Unit 6: Test and measurement in sports. Unit 7: Physiology and injuries in sports. chair sit and reach test arm curl test E ght foot up & go test.	BMI explain
8	November	Unit 8: Biomechanics and sports. Psychology and sports Cardio respiratory system Unit 9: Sports injuries classification Joint injuries dislocation fractures	Equilibrium diagram Lesson test
9	December	Unit 10 : Training in sports Concept of talent identification and talent development in sports Sports training micro, meso, macro cycle.	Flexibility and coordinative abilities. Lesson test
10	January	revision	Test
11	February	Revision	Test
12	March	-----	-----



GATEWAY EDUCATION

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