DSP INTERNATIONAL SCHOOL

ANNUAL ACADEMIC PLANNER

2025– 2026

Grade XII (SCIENCE)

SUBJECT – ENGLISH (301)

TEXTBOOK	UNIT 1	UNIT 2	UNIT 3	UNIT 4
FLAMINGO	Ch.1.The Last Lesson Ch.2.Lost Spring Ch.3.Deep Water	Ch.4.The Rattrap Ch.5.Indigo Ch.6.Poets and Pancakes	Ch.7.The Interview Part-Iand PartII	
	Poem.My Mother at Sixty-Six	2. Poem -An elementary school classroomin a slum(D) 3. Keeping Quiet	Ch.8.Going places	
			Poem- 4.A Thing of Beauty. 5. A Roadside Stand 6. Aunt Jennifer 's Tigers	
Vistas	Ch.1.The Third Level	Ch .4.The Enemy	Ch 8. Memories Of Childhood *The Cutting of My long Hair *We Too are Human Beings	
	Ch.2.The Tiger King	Ch.5.Should Wizard hit Mommy(D)		
	Ch.3.Journey to the end of the earth	Ch.6.On the face of it. Ch.7.Evans Tries an O-level .(D)		
Writing Skil and Grammar	Article,notice writing, Advertisement Writing	Poster-Making, Invitations and Replies,Letter to the editor, Letter of complaint	Letter of Placing order	
	Determiners,tense Re-ordering	Modals,Clauses,Change of voice.	Error correction , editing task,close passages	

SUBJECT- PHYSICS (042)

UNIT 1	UNIT 2	UNIT 3	UNIT 4
Electrostatics **Chapter–1Electric charges and fields** **Chapter–2**: **Electrostatic Potential and capacitance** **Experiments** 1. To determine resistivity of two / three wires by plotting a graph for potential difference versus current 2. To find resistance of a given wire/standard resist or using metrebridge. 3. Toverifythelawsofcombination(series)ofresistancesusingametrebridge.	**Current Electricity** **Chapter–3:Current Electricity** **Magnetic effect of current and magnetism** **Chapter–4:Moving charges and magnetism** **Chapter–5: Magnetism and Matter** **Electromagnetic Waves** **Chapter–8:Electromagnetic waves** **Experiments** 4. To determine resistance of a galvanometer by half-deflection method and to find its figure of merit. 5. To convert the given galvanometer (of known resistance and figure of merit) into a voltmeter of desired range and to verify the same. 6. To find the frequency of AC mains with a sonometer	**Electromagnetic Induction and Altering Current** **Chapter–6: Electromagnetic Induction** **Chapter–7: Altering Current** **Optics** **Chapter–9: Ray optics** **Chapter-10** **Ray optics and optical instruments** **Experiments** **6**. To find the value of *v* for different values of *u* in case of a concave mirror and to find the focal length. 7. To find the focal length of a convex mirror, using a convex lens. 8.To find the focal length of a convex lens by plotting graphs between *u* and *v* orbetween*1/u* and*1/v*. 9. To find the focal length of a concave lens, using a convex lens.	**Dual nature of radiation and matter** **Chapter–11 :Dual nature of radiation and matter** **Atoms And Nuclei** **Chapter–12: Atoms** **Chapter–13: Nuclei** **Electronic Devices** **Chapter–14: Semiconductor Electronics-Materials, Devices and simple circuits** **Experiments** **10.**Todeterminerefractiveindexofaglassslabusingatravellingmicroscope. 11.Tofindtherefractiveindexofaliquidusingconvexlensandplanemirror. 12. Tofindtherefractiveindexofaliquidusingaconcavemirrorandaplanemirror. 13. To draw the I-V characteristic curve for a p-n junction diode in forward and reverse bias. .

SUBJECT- CHEMISTRY (043)

UNIT 1	UNIT 2	UNIT 3	UNIT 4
Theory	**Theory**	**Theory**	**Theory**
Solutions		Haloalkanes and Haloarenes	Amines
Electrochemistry		Alcohols, Phenols and Ethers	Biomolecules
Chemical kinetics	d -and f -Block Elements	Aldehydes, Ketones and Carboxylic Acids	
	Coordination Compounds		
Practical PA - 1	**Practical Term -I**	**Practical PA - 2**	**Practical Term - II**
Experiment	**Experiment**	**Experiment**	**Experiment**
A. Determination of anion and cation from the given salt samples.	B Determination of strength of the given solution of potassium per manganate titrate with Mohrs salt solution.	H .Tests for the functional groups present in organic compounds: Unsaturation, alcoholic, phenolic, aldehyde, ketone and carboxylic group from the given samples . I. Characteristic tests of carbohydrates, fats and proteins in pure samples and their detection in given foodstuffs.	K. Qualitative analysis Determination of one anion and one cation in a given salt Cation: Pb2+, Aℓ3+ , , Ca2+, Ba2+, Mg2+, NH4 + Anions: (CO3) 2- , S2- , (SO3) 2- , (NO2) - , (SO4) 2- , Cℓ- , - , CH3COO- , NO3 - (Note: Insoluble salts excluded) Determination of strength of potassium per manganate titrate with oxalic acid

SUBJECT – BIOLOGY (044)

UNIT 1	UNIT 2	UNIT 3	UNIT 4
Theory	**Theory**	**Theory**	**Theory**
1. Ch-2-Sexual Reproduction in flowering plants	6. Ch-7-Evolution	1. Ch-13-Organisms & populations	Revision of all Chapters
2. Ch-3-Human Reproduction	7. Ch-8-Human health & diseases	2. Ch-14-Ecosystem	
3. Ch-4-Reproductive Health	8. Ch-10- Microbes in human Welfare	3. Ch-15- Biodiversity and its conservation	
4. Ch-5Principles of inheritance & variation	9.Ch-11-Biotechnology-Principles & processes		
5. Ch-6-Molecular basis of inheritance	10. Ch-12-Biotechnology and its Applications		
Practical PA - 1	**Practical Term -I**	**Practical PA - 2**	**Practical Term - II**
Experiment	**Experiment**	**Experiment**	**Experiment**
1. Prepare a temporary mount to observe pollen germination 2. Study the plant population density & frequency by quadrat method	3. prepare a temporary mount of onion root tip to study mitosis	1. Isolate DNA from available plant material such as Spinach, green pea seeds, papaya	
Spotting	**Spotting**	**Spotting**	**Spotting**
1. Flowers adapted to pollination by different agencies (wind, insects, birds) 2.Pollen germination on stigma through a permanent slides 3.Identification of stages of gamete development, T.S. of Testis & T.S. of ovary through permanent slides 4.Meiosis in onion bud cell or grasshopper testis through permanent slides	5.T.S. of blastula through permanent slides (mammalian) 6. Mendelian inheritance using seeds of different colour/sizes of any plant 7. Prepare pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness	1. Controlled pollination-emasculation, tagging & bagging 2. Common diseases causing organisms like Ascaris, Entamoeba, Plasmodium any fungus causing ringworm through permanent slides, models or virtual images or specimens. Comments on symptoms on those diseases. 3.Models specimen showing symbolic association in root nodules of leguminous plants, Cuscuta on host, lichens. 4.Flash cards models showing example of homo and analogous organs.	

SUBJECT- MATHEMATICS (045)

UNIT 1	UNIT 2	UNIT 3	UNIT 4
1.Relations and functions 2.Inverse trigonometric functions 3.Matrices 4.Determinants	5. Continuity and differentiability 6.Application of derivatives 10.Vector + P.A. 1	7. Integrals 8.Application of integrals 9. Differential equations	11. Three-Dimensional geometry 12. Linear programming 13.Probability+ P.A-2

SUBJECT – INFORMATICS PRACTICES (065)

UNIT 1	UNIT 2	UNIT 3	UNIT 4
1.Data Handling using pandas and data visualization	2.Data Handling using pandas II.	2. Database Query using SQL 3. Introduction to Computer Networks	Revision 4.Societal Impact

Programming in Python

1. **To find average and grade for given marks.**
2. **To find the sale price of an item with a given cost and discount (%).**
3. **To calculate perimeter/circumference and area of shapes such as triangle, rectangle, square and circle.**
4. **To calculate Simple and Compound interest.**
5. **To calculate profit-loss for a given Cost and Sell Price.**
6. **To calculate EMI for Amount, Period and Interest.**
7. **To find the largest and smallest numbers in a list.**
8. **To find the sum of squares of the first 100 natural numbers.**
9. **To print the first 'n' multiples of a given number.**
10. **To count the number of vowels in a user entered string.**
11. **To print the words starting with a particular alphabet in a user entered string.**
12. **To print the number of occurrences of a given alphabet in a given string.**
13. **Create a dictionary to store names of states and their capitals.**
14. **Create a dictionary of students to store names and marks obtained in 5 subjects.**
15. **To print the highest and lowest values in the dictionary.**

Data Management: SQL Commands

1. To create a database
2. To create a student table with the student id, class, section, gender, name, dob, and marks as attributes where the student id is the primary key.
3. To insert the details of at least 10 students in the above table.
4. To delete the details of a particular student in the above table.
5. To increase marks by 5% for those students who have Rno more than 20.
6. To display the entire content of the table.

SUBJECT- PHYSICAL EDUCATION (048)

UNIT 1	UNIT 2	UNIT 3	UNIT 4
UNIT 1.Management of Sporting Events 1. Functions of Sports Events Management (Planning, Organising, Staffing, Directing & Controlling) 2. Various Committees & their Responsibilities (pre; during & post) 3. Fixtures and their Procedures – Knock-Out (Bye & Seeding) & League (Staircase, Cyclic, Tabular method) and Combination tournaments. 4. Intramural & Extramural tournaments – Meaning, Objectives & Its Significance5. Community sports program (Sports Day, Health Run, Run for Fun, Run for Specific Cause & Run for Unity) UNIT 2.Children & Women in Sports 1. Exercise guidelines of WHO for different age groups. 2. Common postural deformities-knock knees, flat foot, round shoulders, Lordosis, Kyphosis, Scoliosis, and bow legs and their respective corrective measures. 3. Women's participation in Sports – Physical, Psychological, and social benefits. 4. Special consideration (menarche and menstrual dysfunction)5. Female athlete triad (osteoporosis, amenorrhea, eating disorders.	UNIIT 3:Yoga as preventive measure for Lifestyle Disease 1. Obesity: Procedure, Benefits & Contraindications for Tadasana, Katichakrasana, Pavanmuktasana, Matsayasana, Halasana, Pachimottansana, Ardha – Matsyendrasana, Dhanurasana, Ushtrasana, Suryabedhan pranayama. 2. Diabetes: Procedure, Benefits & Contraindications for Katichakrasana, Pavanmuktasana,Bhujang asana, Shalabhasana, Dhanurasana, Suptavajarasana, Paschimottanasan -a, Ardha -Mastendrasana, Mandukasana, Gomukasana, Yogmudra, Ushtrasana, Kapalabhati. 3. Asthma: Procedure, Benefits & Contraindications for Tadasana, Urnit 3. dhwahastottansana, UttanMandukasan -a, Bhujangasana, Dhanurasana,	UNIT 6.Test & Measurement in Sports 1. Fitness Test – SAI Khelo India Fitness Test in school: Age group 5-8 years/ class 1-3: BMI, Flamingo Balance Test, Plate Tapping Test Age group 9-18yrs/ class 4-12: BMI, 50mt Speed test, 600mt Run/Walk, Sit & Reach flexibility test, Strength Test (Partial Abdominal Curl Up, PushUps for boys, Modified Push-Ups for girls).2. Measurement of CardioVascular Fitness – Harvard Step Test – Duration of the Exercise in Seconds x100/5.5 X Pulse count of 1-1.5 Min after Exercise. 3. Computing Basal Metabolic Rate (BMR) 4. Rikli & Jones - Senior Citizen Fitness Test Chair Stand Test for lower body strength Arm Curl Test for upper body strength Chair Sit & Reach Test for lower body flexibility Back Scratch Test for upper body flexibility Eight Foot Up & Go Test for agility Six-Minute Walk	UNIT 9. Psychology and Sports 1. Personality; its definition & types (Jung Classification & Big Five Theory)2. Motivation, its type & techniques. 3. Exercise Adherence: Reasons, Benefits & Strategies for Enhancing it 4. Meaning, Concept & Types of Aggressions in Sports 5. Psychological Attributes in Sports – Self-Esteem, Mental Imagery, SelfTalk, Goal Setting UNIT 10.Training in Sports 1. Concept of Talent Identification and Talent Development in Sports 2. Introduction to Sports Training Cycle – Micro,Meso, Macro Cycle. 3. Types & Methods to Develop – Strength, Endurance, and

	Ushtrasana, Vakrasana, Kapalbhati, Gomukhasana Matsyaasana, Anuloma - Viloma. 4. Hypertension: Procedure, Benefits & Contraindications for Tadasana, Katichakransan, Uttanpadasana, Ardha Halasana, Sarala Matyasana, Gomukhasana, UttanMandukasan-a, Vakrasana, Bhujangasana, Makarasana, Shavasana, Nadishodhanapranayam, Sitlipranayam. 5. Back Pain and Arthritis: Procedure, Benefits & Contraindications of Tadasan, Urdhawahastootansana, Ardh-Chakrasana, Ushtrasana, Vakrasana, Sarala Maysyendrsana, Bhujandgasana, Gomukhasana, Bhadrasana, Makarasana, NadiShodhana pranayamaVnit UNIT 4.Physical Education and Sports for CWSN (Children with Special Needs - Divyang) 1. Organizations promoting Disability Sports (Special Olympics; Paralympics; Deaflympics)2. Concept of Classification and Divisioning in Sports. 3. Concept of Inclusion in sports, its need, and Implementation; 4. Advantages of Physical Activities for children with special needs. 5. Strategies to make Physical Activities	Test for Aerobic Endurance 5. Johnsen – Methney Test of Motor Educability (Front Roll, Roll, Jumping Half-Turn, Jumping fullturn UNIT 7.Physiology & Injuries in Sport 1. Physiological factors determining components of physical fitness 2. Effect of exercise on the Muscular System 3. Effect of exercise on the Cardio-Respiratory System 4. Physiological changes due to aging 5. Sports injuries: Classification (Soft Tissue Injuries - Abrasion, Contusion, Laceration, Incision, Sprain & Strain; Bone & Joint Injuries - Dislocation, Fractures - Green Stick, Comminuted, Transverse Oblique & Impacted) UNIT 8.Biomechanics and Sports 1. Newton's Law of Motion & its application in sports 2. Types of Levers and their application in Sports. 3. Equilibrium – Dynamic & Static and Centre of Gravity and its application in sports 4. Friction & Sports 5. Projectile in Sports	Speed. 4. Types & Methods to Develop – Flexibility and Coordinative Ability. 5. Circuit Training - Introduction & its importanceS

	assessable for children with special needs. UNIT 5.Sports & Nutrition 1. Concept of balanced diet and nutrition 2. Macro and Micro Nutrients: Food sources & functions 3. Nutritive & Non-Nutritive Components of Diet 4. Eating for Weight control– A Healthy Weight, The Pitfalls of Dieting, Food Intolerance, and Food Myths 5. Importance of Diet in Sports-Pre, During and Post competition Requirements		