

ENGLISH – XII A,B,C,D

LEARNING OUTCOMES

The general objectives at this stage are to:

- listen and comprehend live as well as record in writing oral presentations on a variety of topics
 - develop greater confidence and proficiency in the use of language skills necessary for social and academic purpose to participate in group discussions, interviews by making short oral presentation on given topics
 - perceive the overall meaning and organisation of the text (i.e., correlation of the vital portions of the text)
 - identify the central/main point and supporting details, etc., to build communicative competence in various lexicons of English
 - promote advanced language skills with an aim to develop the skills of reasoning, drawing inferences, etc. through meaningful activities
 - translate texts from mother tongue(s) into English and vice versa
 - develop ability and acquire knowledge required in order to engage in independent reflection and enquiry
 - read and comprehend extended texts (prescribed and non-prescribed) in the following genres: science fiction, drama, poetry, biography, autobiography, travel and sports literature, etc.
 - text-based writing (i.e., writing in response to questions or tasks based on prescribed or unseen texts) understand and respond to lectures, speeches, etc.
- write expository / argumentative essays, explaining or developing a topic, arguing a case, etc. write formal/informal letters and applications for different purposes
- make use of contextual clues to infer meanings of unfamiliar vocabulary
 - select, compile and collate information for an oral presentation
 - produce unified paragraphs with adequate details and support
 - use grammatical structures accurately and appropriately
 - write items related to the workplace (minutes, memoranda, notices, summaries, reports etc.
 - filling up of forms, preparing CV, e-mail messages., making notes from reference materials, recorded talks etc. The core course should draw upon the language items suggested for class IX-X and delve deeper into their usage and functions. Particular attention may, however, be given to the following areas of grammar:
- The use of passive forms in scientific and innovative writings.
 - Convert one kind of sentence/clause into a different kind of structure as well as other items to exemplify stylistic variations in different discourses modal auxiliaries uses based on semantic considerations.

<p style="text-align: center;">MARCH</p> <p>Familiarization with the course and marking scheme</p> <p><u>Literature</u> My Mother at Sixty-Six An Elementary School Classroom in a Slum *Keeping Quiet, A Thing of Beauty *Aunt Jennifer’s Tigers</p>	<p style="text-align: center;">APRIL</p> <p><u>Literature</u> The Last Lesson Lost Spring, The Third Level</p> <p><u>Writing Skills Formal</u> Letters , Articles</p> <p><u>Reading Skills:</u> Comprehension</p>	
<p style="text-align: center;">MAY</p> <p><u>Writing Skills</u> Notice writing</p> <p><u>Literature</u> Deep Water The Ratttrap, Indigo</p>	<p style="text-align: center;">JULY</p> <p>Literature - Should Wizard Hit Mommy On the Face of It</p> <p>Writing Skills Invitations & their replies</p>	
<p style="text-align: center;">AUGUST</p> <p><u>Literature-</u> Evans Tries an O’ Level, The Enemy, Journey to the End of the Earth</p> <p><u>Writing Skills-</u> Advertisements(Display & Classified)</p>	<p style="text-align: center;">SEPTEMBER</p> <p>Writing Skills Letter – Job Application</p> <p>ASSESSMENT OF LISTENING AND SPEAKING (ASL)</p> <p><u>REVISION</u></p>	
<p style="text-align: center;">OCTOBER</p> <p><u>Literature</u> The Tiger King, The Interview, Poets and Pancakes</p>	<p style="text-align: center;">NOVEMBER</p> <p><u>Literature</u> Going Places, A Roadside Stand, Memories of Childhood</p> <p><u>REVISION</u></p>	
<p style="text-align: center;">DECEMBER <u>PREBOARD I</u></p>	<p style="text-align: center;">JANUARY <u>PREBOARD II</u> <u>ASL</u></p>	<p style="text-align: center;">FEBRUARY</p>

MATHEMATICS – CLASS XII A,B,C,D

LEARNING OUTCOMES

Higher secondary students are increasingly expected to engage in mathematical practices to help develop mathematical habits of their minds

The learners may be provided with opportunities individually or in groups and encouraged to think holistically. The student will be able to :

- Identify different types of relations and functions.
- explore the values of different inverse trigonometric functions
- Evolve the idea of matrices as a way of representing and simplifying mathematical concepts.
- Evaluate determinants of different square matrices using their properties.
- Demonstrate ways to relate differentiability and continuity of a function with each other.
- Develop the processes in Integral calculus based on the ideas of differential calculus learnt earlier.
- Apply the concepts of Integral calculus to calculate the areas enclosed by curves.
- Develop the concepts of differential equations using the ideas of differential
- Constructs the idea of vectors and their properties and relates them to earlier learnt concepts in different areas of mathematics such as geometry, coordinate geometry etc.
- Evolve newer concepts in three dimensional geometry from that learnt earlier, in the light of vector algebra, such as, direction cosines, equations of lines and planes under different conditions etc. Formulates and solves problems related to maximization/ minimization of quantities in daily life situations using systems of inequalities/inequations learnt earlier.
- Calculate conditional probability of an event and uses it to evolve Baye’s theorem and multiplication rule of probability.
- Determine mean and variance of a probability distribution using the concept of random variable.

MARCH Inverse Trigonometry	APRIL Matrices Determinants	
MAY Continuity and Differentiability	JULY Application of Derivatives	
AUGUST Integrals Application of Integrals	SEPTEMBER Differential Equations Vector Algebra Three Dimensional Geometry	
OCTOBER Linear Programming Probability	NOVEMBER Relations and Functions	
DECEMBER REVISION	JANUARY REVISION	FEBRUARY REVISION

PHYSICS - XIID

LEARNING OUTCOMES

A study of Physics will inculcate among the pupils a few skills and thus, at the end of the session the students will:

- Develop a basic conceptual knowledge and understanding of content and acquire a clear understanding of the laws, principles, basic facts, and key concepts.
- Apply the knowledge gained, to define and differentiate between terms and key concepts pertinent to Physics and use SI units, symbols as per international standards.
- Develop a better insight into the subject and thus encourage them to do further reference reading.
- Develop aesthetic sensibilities, process skills, creative and critical thinking, decision-making, communication, analytical, problem solving and drawing skills.
- Develop investigatory skills, the skills in performing experiments, tabulating observations, plotting graphs, and drawing inferences.
- Develop a scientific temperament and appreciation of scientific facts, a spirit of enquiry, a systematic, creative, ethical, and meticulous approach towards problem solving.
- Apply the knowledge gained, to daily life situations and problems, thus making Physics learning more relevant, meaningful, and interesting.
- Apply the knowledge gained to integrate physical principles with music, dance, art, sports, tricks, and magic.
- Enumerate the different processes, used in Physics, related to industrial and technological applications.
- Develop conceptual competence in the learners and foster a liking for the subject to cope up with professional courses leading to higher studies in future.
- Be able to collaborate, innovate, organize, brainstorm, and communicate new ideas and technology.
- Contribute significantly in, the improvement of the quality of life.

<u>MARCH</u>	<u>APRIL</u>
1. ELECTROSTATICS – 1 2. CURRENT ELECTRICITY	1. ELECTROSTATICS – 2 2. RAY OPTICS
<u>MAY</u>	<u>JULY</u>
1. MAGNETISM 2. MAGNETIC EFFECT OF ELECTRIC CURRENT 3. RAY OPTICS	1. ELECTROMAGNETIC INDUCTION 2. ALTERNATING CURRENT CIRCUITS
<u>AUGUST</u>	<u>SEPTEMBER</u>
1. ELECTROMAGNETIC WAVES 2. WAVE OPTICS	1. REVISION 2. FIRST TERM EXAM
<u>OCTOBER</u>	<u>NOVEMBER</u>
1. ELECTRONS AND PHOTONS 2. SEMICONDUCTOR DEVICES	1. ATOMS AND NUCLEI 2. REVISION
<u>DECEMBER</u>	<u>JANUARY</u>
REVISION ANNUAL EXAM	PRE-BOARD EXAM

CHEMISTRY - XIID

LEARNING OUTCOMES

A study of chemistry will inculcate among the pupils a few skills and thus, at the end of the session the students will be:

- Develop a basic conceptual knowledge and understanding of content and acquire a clear understanding of the laws, principles basic facts, and key concepts.
- Apply the knowledge gained to define and differentiate between terms and key concepts.
- Develop a better insight into the subject and thus encourage them to do further reference reading.
- Develop aesthetic sensibilities, process skills, creative and critical thinking, decision – making, communication, analytical, problem solving and drawing skills.
- Develop investigatory skills, the skills in performing experiments, tabulating observations, plotting graphs, and drawing inferences.
- Develop a scientific temperament and appreciation of scientific facts, a spirit of enquiry, a systematic, creative, ethical, and meticulous approach towards problem solving.
- Apply the knowledge gained to daily life situation and problems, thus making chemistry learning more relevant, meaning, and interesting.
- Apply the knowledge gained to integrate physical principles with music, dance, art, sports, tricks, and magic.
- Be able to collaborate, innovate, organize, brainstorm, and communicate new ideas and technology.
- Contribute significantly in, the improvement of the quality of life.

MARCH		APRIL			
1.Haloalkanes and Haloarenes		1.Alcohols, Phenols and Ethers			
		2.Aldehydes, Ketones and Carboxylic Acids			
MAY		JULY			
1.Amines:		1.Solutions			
2.Cyanides and Isocyanides		2.Chemistry in Everyday Life			
3.Diazonium salts					
AUGUST		SEPTEMBER			
1.Electro Chemistry		1.General Principles and Process of Isolation of Elements			
2.Coordination Compounds		2.Polymer			
OCTOBER		NOVEMBER			
1. Biomolecules		1. Group 16 elements, Group 17 elements, Group 18 elements			
2. Chemical kinetics		2. D and F Block Elements Lanthanoids, Actinoids			
3. Surface Chemistry					
		JANUARY		FEBRUARY	
DECEMBER		PRE-BOARD EXAM			
REVISION		BOARD PRACTICAL EXAM			
ANNUAL EXAM					

COMPUTER SCIENCE - XIID

LEARNING OUTCOMES

The technology field is growing rapidly, and businesses are looking for well-rounded computer scientists who are skilled in a full spectrum of emerging technologies and able to create innovative solutions to technical challenges.

Through our pragmatic and flexible approach to education, students will learn essential skills in computer science and will also be able to focus their degree to an area of interest that allows them be immediately valuable in today's workforce; they'll take a more contemporary approach to the analysis, design, and implementation of critical software applications.

Upon completion of their academic requirements, Senior School Computer Science students of Holy Child Sr. Sec School will be prepared to choose their future goal to launch their careers.

Learning outcomes of Computer Science during the session for the students is to start :

- **Systems Thinking.** Analyze, design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- **Problem-Solving.** Identify problems and formulate solutions for systems and organizations while reconciling conflicting objectives and finding compromises.
- **Communication.** Communicate effectively with a range of audiences.
- **Teamwork.** Work effectively as part of a team to develop and deliver quality software artifacts.
- **Context Awareness.** Design solutions using approaches that integrate ethical, social, legal, and economic responsibilities.
- **Cultural and Global Awareness.** Recognize the applicability of computing and evaluate its impact on individuals, organizations, and global society.
- **Professional Practice.** Evaluate and use appropriate methods and professional standards in computing practice.
- **Professional Development.** Explore historical, current, and emerging techniques and technologies, founded on a commitment to lifelong learning and professional development.
- **Technical Expertise.** Apply knowledge of computing and mathematics within technical domains.
- **Pragmatic Approach.** Apply computing theory and programming principles to practical software design and development.

And at the end of the session they will be able to :-

- Apply the concept of functions and recursion.
- Ability to create and use Python libraries.
- Apply the concept of file handling.
- Make use of the concept of efficiency in algorithms and computing in general.
- Ability to use basic data structures: Stacks and Queues.
- Explain the basics of computer networks.
- Ability to use connectivity between Python and SQL.

<p style="text-align: center;"><u>MARCH</u></p> <p>Unit 3 : Database Management</p> <ul style="list-style-type: none"> ➤ Database Concepts ➤ Relational data model ➤ Structured Query Language(To be continued.....) 	<p style="text-align: center;"><u>APRIL</u></p> <p>Unit 3 : Database Management</p> <ul style="list-style-type: none"> • Structured Query Language(continued.....) <p>UNIT 1: Computational Thinking and Programming - 2</p> <ul style="list-style-type: none"> ➤ Revision of the basics of Python covered in Class XI. ➤ Functions ➤ Recursion
<p style="text-align: center;"><u>MAY</u></p> <p>UNIT 3: Database Management(Continued....)</p> <ul style="list-style-type: none"> ➤ Interface of Python with an SQL database: <ul style="list-style-type: none"> ○ Connecting SQL with Python ○ Creating Database connectivity Applications ○ Performing Insert, Update, Delete queries ○ Display data by using fetchone(),fetchall(),rowcount,creating database connectivity applications ○ Group formation and detailed discussion on selection of project title , partners and implementation of it for Board Practical exam ➤ Detailed Assignment for Summer break 	<p style="text-align: center;"><u>JULY</u></p> <p>UNIT 1: Computational Thinking and Programming – 2(Continued.....)</p> <ul style="list-style-type: none"> ➤ Introduction to files , types of files ➤ Text File ➤ Binary File
<p style="text-align: center;"><u>AUGUST</u></p> <p>UNIT 1: Computational Thinking and Programming – 2</p> <ul style="list-style-type: none"> ➤ File handling <ul style="list-style-type: none"> ○ CSV File ○ Sample project on file handling ➤ Python Libraries ➤ Idea of Efficiency ➤ Assessment of raw formation of Board project source code with/without bugs ➤ First Terminal Practical Exam 	<p style="text-align: center;"><u>SEPTEMBER</u></p> <ul style="list-style-type: none"> ➤ Revision for First Terminal Exam ➤ Commencement of First Terminal Exam
<p style="text-align: center;"><u>OCTOBER</u></p> <p>UNIT 1: Computational Thinking and Programming – 2</p> <ul style="list-style-type: none"> ➤ Data-structure <p>UNIT 2: Computer Networks</p> <ul style="list-style-type: none"> ➤ Evolution of Networking ➤ Data Communication terminologies ➤ Transmission media ➤ Network Devices 	<p style="text-align: center;"><u>NOVEMBER</u></p> <p>UNIT 2: Computer Networks</p> <ul style="list-style-type: none"> ➤ Network topologies and Network types ➤ Network protocol ➤ Mobile telecommunication technologies ➤ Introduction to web services <p>Board Project Demonstration and Final Submission</p> <p>Revision</p> <p>Pre-Board Practical Exam</p>
<p style="text-align: center;"><u>DECEMBER</u></p> <p>Commencement of Pre Board Exams</p>	

ECONOMICS – XII A,C,D

LEARNING OUTCOMES

- To develop an understanding about the economy and it's behaviour in the context of global changes affecting the immediate society and environment.
- To develop a sense of responsibility towards the society and the economy at large.
- To enable learners to become perceptive, socially aware, and self reliable.
- To facilitate students' quest for personal growth and effectiveness, and to enable them to become responsive and responsible citizens.
- To make students aware about the recent banking changes and how the economy is going to be affected by this.
- To make a detailed study about the sources of income expenditure in the economy.

<p style="text-align: center;">MARCH</p> <p>Unit -6 Development experience (1947 – 90) and economic reforms since 1991</p>	<p style="text-align: center;">APRIL</p> <p>Unit – 7 Current challenges facing Indian Economy</p>
<p style="text-align: center;">MAY</p> <p>Unit – 7 current challenges facing Indian Economy(continued)</p>	<p style="text-align: center;">JULY</p> <p>Unit – 8 Development experience of India A comparison with neighbours</p>
<p style="text-align: center;">AUGUST</p> <p>Unit – 1 National income and Related Aggregates</p>	<p style="text-align: center;">SEPTEMBER</p> <p>Unit – 2 Money and Banking Project work</p>
<p style="text-align: center;">OCTOBER</p> <p>Unit – 3 Determination of Income and Employment</p>	<p style="text-align: center;">NOVEMBER</p> <p>Unit-4 Government Budget and the Economy Unit – 5 Balance of payments</p>
<p>DECEMBER Revision & Annual Exam</p>	<p style="text-align: center;">JANUARY</p> <p>Pre-Board</p>

PHYSICAL EDUCATION – CLASS XII A,B,C,D

LEARNING OUTCOMES

Physical education is the study in which we teach the students about body motion and better methods to improve their body performance. Physical Education is more than subject where students learn to focus on Physical fitness that will help the growth of the body.

By promoting Physical education we can help students establish life long health patterns and boost scholastic success.

* At the end of session the student will be able to :

*Students will understand how and why they move in variety of situation and use this information to enhance their own skills.

*Acquire knowledge about Physical and health education.

*Understand the rules and regulations of sports and games.

*Develop the skills in organizing the physical education programme in school.

*Develop the activities required for organizing physical education meets and events.

*Acquire knowledge about recreation, health, and safety education.

*Acquire knowledge about common communication diseases.

*Understand the nature of injuries and to provide first aid.

*Acquire knowledge about yoga and physical exercises.

*Create awareness on different aspects of health and fitness.

*Understand the diet modification in the treatment of under -weight and obesity.

MARCH

Unit I
Planning in sports.

APRIL

Unit II
Sports & Nutrition
Unit III
Yoga and Lifestyle

MAY

Unit IV
Physical Education and Sports for CWSN
Unit V
Children and Women in Sports

JULY

Unit VI
Test & Measurement in Sports

AUGUST

Unit VII
Physiology & Injuries in sports
Unit VIII
Biomechanics & Sports

SEPTEMBER

Unit IX
Psychology & Sports

OCTOBER

Unit X
Training in Sports

NOVEMBER

Revision

<u>DECEMBER</u>	<u>JANUARY</u>
ANNUAL EXAM	PRE-BOARD EXAM

ZOOLOGY – XII D

Learning outcomes:-

A study of biology will inculcate among the students a few skills and thus at the end of the session the students will

- Acquire the ability to utilize technology and information for the betterment of humankind
- Strengthen knowledge and attitude related to livelihood skills and promote lifelong learning;
- Develop the ability to appreciate art and showcase talents;
- Promote physical fitness, health and provide ample scope for physical, intellectual and social development of students;
- Uphold Human Dignity of Individual and the Unity and integrity of the Nation by encouraging values-based learning activities;
- Nurture Life-Skills by prescribing curricular and co-curricular activities to help improve self-esteem, empathy towards different cultures etc.;
- Integrate innovation
- Help in making students perceptive about nature, the environment, technology breakthrough in science.
- Knowledge and skills to develop a scientific attitude and to use and apply such knowledge for improving the quality of life.
- Analyze and evaluate existing scenarios and propose innovative solutions to situations.
- Learners understand and appreciate the physical, biological and technological world and acquire the knowledge and develop attitude, skills and values to make rational decisions in relation to it.

MARCH & APRIL 1.HUMAN REPRODUCTION	MAY 1. REPRODUCTIVE HEALTH 2. BIODIVERSITY AND CONSERVATION
JULY 1. HUMAN HEALTH AND DISEASES. 2. MOLECULAR BASIS OF INHERITANCE	AUGUST 1.MOLECULAR BASIS OF INHERITANCE (Continue..)
SEPTEMBER 1. ORGANISMS AND POPULATION REVISION HALF YEARLY EXAM	OCTOBER 1.BIO TECHNOLOGY PRINCIPLES AND PROCESSES 2. BIOTECHNOLOGY AND ITS APPLICATION
NOVEMBER REVISION	DECEMBER ANNUAL EXAM
JANUARY PRE BOARD EXAM	

BOTANY – XIID

LEARNING OUTCOMES:

A study of Biology will inculcate among the pupils a few skills and thus at the end of the session, the students will...

1. Identify and develop understanding of concepts, principles, theories and laws governing the physical world around a biological entity.
2. Develop ability to acquire and use the methods and processes of science, such as observing, questioning, planning investigations, hypothesing, collecting, analysing and interpreting data, communicating explanation with evidences, justifying explanations, thinking critically to consider and evaluate alternative explanation, etc.in the biological prespectives.
3. Build upon the perceptive of basic tools and techniques used in concepts to analyse various issues in biology.
4. Conduct experiments also involving quantitative measurements in Biology.
5. Appreciate how concepts in biology evolve with time giving importance to its historical perspective.
6. Develop scientific temper with respect to Biological phenomena (objectivity, critical thinking, creative skills, freedom from fear and prejudice, etc.)
7. Nurture natural curiosity, aesthetic sense and creativity in biological processes and phenomena.
8. Imbibe the values of honesty, integrity, cooperation, concern for life and preservation of environment.
9. Develop respect for human dignity and rights, equity and equality.
10. Connect biological concepts to real life problems and develop innovative problem solving abilities to solve problem related to life situations through understanding of biological concepts.
11. Widen skills to illustrate linkages of elementary aspects of biology with complex phenomena.
12. Apply biological discoveries or innovations in everyday life.
13. Integrate and interrelate the biological concepts with other areas of knowledge by underlying common principles.

Month:	Chapter:
March	Term 1 Chapter 1. Reproduction in organisms. Chapter 2. Sexual reproduction in flowering plants.
April	Chapter 2. Sexual reproduction in flowering plants continuing.
May	Chapter 7. Evolution
July	Chapter 5. Principles of inheritance and variation.
August	Chapter 9. Strategies for enhancement in food production.
September	Revision

October	Term 2 Chapter 10. Microbes in human welfare. Chapter 14. Ecosystem.
November	Chapter 16. Environmental issues. Revision
December	Annual Exam
January	Pre Board Exam

PSYCHOLOGY – XIIA,B,D

LEARNING OUTCOMES	
<ul style="list-style-type: none"> ➤ To develop appreciation about human mind and behaviour in the context of learners’ immediate society and environment. ➤ To develop in learners an appreciation of the nature of psychological knowledge and its application to various aspects of life. ➤ To enable learners to become perceptive, socially aware, and self-reflective. ➤ To facilitate students’ quest for personal growth and effectiveness, and to enable them to become responsive and responsible citizens. 	
MARCH Unit -1 Variations in Psychological Attributes	APRIL Unit – 2 Self and Personality
MAY Unit – 3 Meeting Life Challenges	JULY Unit – 4 Psychological Disorders
AUGUST Unit – 5 Therapeutic Approaches	SEPTEMBER Unit – 5 Therapeutic Approaches

<p style="text-align: center;">OCTOBER</p> <p>Unit – 6 Attitude and Social Cognition Unit – 7 Social Influence and Group Processes</p>	<p style="text-align: center;">NOVEMBER</p> <p>Unit – 8 Psychology & Life Unit – 9 Developing Psychological Skills</p>	
<p style="text-align: center;">DECEMBER</p> <p>Revision & Annual Exam</p>	<p style="text-align: center;">JANUARY</p> <p>Pre-Board</p>	<p style="text-align: center;">FEBRUARY</p> <p style="text-align: center;">-----</p>