

ANNUAL
CURRICULUM
PLAN

CLASS XI SCIENCE
(SESSION: 2018-19)

GOLAYA PROGRESSIVE PUBLIC SCHOOL, PALWAL

ANNUAL CALENDAR (SESSION: 2018-19)

April 2018 (Working days = 23)						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 Session begins	3	4	5	6	7 World Health Day
8	9	10	11	12	13 Baisakhi Celebrations	14 <i>Holiday (Ambedkar Jayanti)</i>
15	16	17	18 World Heritage Day	19	20	21
22	23 World Book & Copyright Day	24	25 Inter House Solo Song & Dance (Sr.) Competition	26-27 Inter House Volleyball Match		28 Parent Teacher Meeting
29	30 <i>Holiday (Buddha Purnima)</i>					

May 2018 (Working days = 13+13)						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Commencement of Periodic Test 1	2 Intl. Labour Day	3	4	5
6	7	8 World Red Cross Day	9 Culmination of Periodic Test 1	10	11 National Technology Day	12 <i>Holiday for students on account of 2nd Saturday</i>
13 Mother's Day	14	15 International Day of the Family	16	17 <i>* Commencement of Summer Break for Class VI - VIII / Extra Class for IX - XII</i>	18	19
20	21	22	23	24	25	26
27	28	29	30	31 Anti Tobacco Day	* subject to change as per Govt. instructions	

June 2018 (Working days = 02)						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4 <i>Commencement of Summer Break for Class IX - XII</i>	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21 International Day of Yoga	22	23
24	25	26	27	28	29	30

July 2018 (Working days = 25)						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 The school will open after Summer Vacation	3 Van Mahotsav	4	5	6	7
8	9	10	11 World Population Day	12	13	14 <i>Holiday for students on account of 2nd Saturday</i>
15	16	17	18	19	20	21 Inter House Yoga Competition
22	23	24	25 Kargil Victory Day	26	27 Inter House kho-kho competition (Semi Final)	28 Inter House kho-kho competition (Final)
29	30 Investiture Ceremony	31 Parent Teacher Meeting	World Nature Conservation Day			

GOLAYA PROGRESSIVE PUBLIC SCHOOL, PALWAL ANNUAL CALENDAR (SESSION: 2018-19)

August 2018 (Working days = 23)						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7	8 World Senior Citizens' Day	9 Independence Celebrations Week	10 Inter House Solo Song (Jr.) Competition (Theme - Patriotic)	11 Holiday for students on account of 2 nd Saturday
12	13 Holiday (Teej)	14 Inter House Solo Dance (Jr.) Competition (Theme - Patriotic)	15 Holiday (Independence Day)	16	17 Inter House Basketball Match	18
19	20	21	22 Holiday (Id-ul-Zuha)	23	24	25 Activities on Rakshabandhan Commencement of Sanskrit Week
26 Rakshabandhan	27	28	29 National Sports Day	30 Inter House Taekwondo Competition	31 Parent Teacher Meeting	

September 2018 (Working days = 22)						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3 Holiday (Janmashtami)	4	5 Teachers' Day Celebrations	6	7	8 Holiday for students on account of 2 nd Saturday
9	10 Commencement of Half Yearly Exam. for Class I - XII	11	12	13	14	15
16	17	18 Culmination of Half Yearly Exam.	19	20	21 Holiday (Muharram)	22
23	24	25	26 Day of the Deaf	27 World Tourism Day	28 Inter House Badminton Match	29 Parent Teacher Meeting
30						

October 2018 (Working days = 18)						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 International Day for the Elderly World Habitat Day	2 Holiday (Gandhi Jayanti)	3	4 World Animal Welfare Day	5	6
7	8 Air Force Day	9 World Post Office Day	10 National Post Day	11 Intl. Day of the Girl Child World Sight Day	12 National Day for Disaster	13 Holiday for students on account of 2 nd Saturday
14	15 * Commencement of Autumn Break	16 World Food Day	17	18	19 Dussehra	20 * Culmination of Autumn Break
21	22	23	24 United Nations Day World Devp. Information Day	25	26 Inter House Group Song & Group Dance Competition	27 Holiday (Karva Chauth)
28	29	30	31 Parent Teacher Meeting	* subject to change as per Govt. instructions		

November 2018 (Working days = 18)						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Holiday (Haryana Day)	2	3
4	5 World Tsunami Day	6	7 Holiday (Diwali)	8 Holiday (Goverdhan Puja)	9 Holiday (Bhai Dooj)	10 Holiday for students on account of 2 nd Saturday
11	12	13	14 Children's Day Celebrations Diabetes Day	15	16	17 Annual Exhibition
18	19 Holiday	20	21 Holiday (Id-e-Milad)	22	23 Holiday (Guru Nanak Devji's Birthday)	24
25	26 Constitution Day	27	28	29	30	

GOLAYA PROGRESSIVE PUBLIC SCHOOL, PALWAL ANNUAL CALENDAR (SESSION: 2018-19)

December 2018 (Working days = 23)						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 World AIDS Day
2	3 World Day of the Handicapped	4 Indian Navy Day	5	6 Commencement of Periodic Test 2 / Pre-Board Exam.	7 Indian Armed Forces Flag Day	8 Holiday for students on account of 2 nd Saturday
9	10 Human Rights Day	11	12	13	14	15 Culmination of Periodic Test 2 / Pre-Board Exam. for Class I - XII
16	17	18	19	20	21	22 National Mathematics Day
					Annual Sports Meet	
23 Farmer's Day	24 Good Governance Day Christmas Celebrations	25 Holiday (Christmas)	26	27	28	29 Parent Teacher Meeting
30	31 * Commencement of Winter Break	* subject to change as per Govt. instructions				

January 2019 (Working days = 19)						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5 * Culmination of Winter Break
6	7	8	9	10 Commencement of Pre-Board Exam. of Class XII	11	12 Holiday for students on account of 2 nd Saturday
13	14	15 Holiday (Makar Sankranti) Army Day	16	17	18	19
20	21	22	23 Culmination of Pre-Board Exam. of Class XII	24	25 Republic Day Celebrations Farewell to Class XII	26 Holiday (Republic Day)
27	28	29	30 Martyrs' Day	31 Parent Teacher Meeting	* subject to change as per Govt. instructions	

February 2019 (Working days = 23)						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Commencement of Board Practicals of Class XII	2
3	4 Commencement of Annual Exam. of class IX & XI	5	6	7	8	9 Holiday for students on account of 2 nd Saturday
10	11	12	13	14	15 Culmination of Annual Exam. of class IX	16
17	18	19	20 Culmination of Annual Exam. of class XI	21	22	23
24	25	26	27 National Science Day	28 Parent Teacher Meeting		

March 2019 (Working days = 13)						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Commencement of CBSE AISSE & AISSCE	2
3	4 Holiday (Mahashivratri)	5 Commencement of Annual Examination for Class I - VIII	6	7	8 International Women's Day	9 Holiday for students on account of 2 nd Saturday
10	11	12	13	14	15 World Disabled Day	16
17	18 Culmination of Annual Examination	19	20	21 Holiday (Holi)	22 Holiday (Good Friday) World Day for Water	23
24 World TB Day	25	26	27 Result Declaration	28	29	30
31						

TEST SCHEDULE

Subject	Periodic Test 1	Half Yearly Exam.
Physics	03.05.2018	12.09.2018
Mathematics / Biology	04.05.2018	13.09.2018
Chemistry	07.05.2018	15.09.2018
Computer Science / Physical Education	08.05.2018	17.09.2018
English	09.05.2018	18.09.2018
Computer Science / Physical Education Practical		19.09.2018
Physics Practical		20.09.2018
Biology Practical		22.09.2018
Chemistry Practical		24.09.2018

TEST SCHEDULE

Subject	Periodic Test 2
<i>Chemistry Practical</i>	06.12.2018
English	10.12.2018
Mathematics	11.12.2018
Computer Science / Physical Education	12.12.2018
Chemistry	14.12.2018
Physics	15.12.2018
<i>Computer Science / Physical Education Practical</i>	17.12.2018
<i>Physics Practical</i>	18.12.2018
<i>Biology Practical</i>	19.12.2018

Subject	Annual Examination
English	04.02.2019
Physics	06.02.2019
Chemistry	08.02.2019
Mathematics	11.02.2019
Computer Science / Physical Education	13.02.2019
<i>Physical Education Practical</i>	15.02.2019
<i>Chemistry Practical</i>	16.02.2019
<i>Computer Science Practical</i>	18.02.2019
<i>Physics Practical</i>	19.02.2019
<i>Biology Practical</i>	20.02.2019

DETAILED SYLLABUS OF ENGLISH

Background

Students are expected to have acquired a reasonable degree of language proficiency in English by the time they come to class XI, and the course will aim, essentially, at promoting the higher-order language skills.

For a large number of students, the higher secondary stage will be a preparation for the university, where a fairly high degree of proficiency in English may be required. But for another large group, the higher secondary stage may be a preparation for entry into the world of work. The Core Course should cater to both groups by promoting the language skills required for academic study as well as the language skills required for the workplace.

Objectives

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
- to 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
- to perceive the overall meaning and organisation of the text (i.e., the relationships of the different "chunks" in the text to each other
- to identify the central/main point and supporting details, etc., to build communicative competence in various registers of English
- to promote advanced language skills with an aim to develop the skills of reasoning, drawing inferences, etc. through meaningful activities
- to translate texts from mother tongue(s) into English and vice versa
- to develop ability and knowledge required in order to engage in independent reflection and enquiry

At the end of this stage learners will be able to do the following:

- 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
- 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.

Converting 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.

Specific Objectives of Reading

Students are expected to develop the following study skills:

- refer to dictionaries, encyclopaedia, thesaurus and academic reference material
- select and extract relevant information, using reading skills of skimming and scanning
- understand the writer's attitude and bias
- comprehend the difference between what is said and what is implied
- understand the language of propaganda and persuasion
- differentiate between claims and realities, facts and opinions
- form business opinions on the basis of latest trends available
- comprehend technical language as required in computer related fields
- arrive at personal conclusion and comment on a given text specifically
- develop the ability to be original and creative in interpreting opinion
- develop the ability to be logically persuasive in defending one's opinion
- making notes based on a text

Develop literary skills as enumerated below:

- personally respond to literary texts
- appreciate and analyse special features of languages that differentiate literary texts from non-literary ones
- explore and evaluate features of character, plot, setting, etc.
- understand and appreciate the oral, mobile and visual elements of drama
- identify the elements of style such as humour, pathos, satire and irony, etc.
- make notes from various resources for the purpose of developing the extracted ideas into sustained pieces of writing

Listening and Speaking

Speaking needs a very strong emphasis and is an important objective leading to professional competence. Hence, testing of oral skills must be made an important component of the overall testing pattern. To this end, speaking and listening skills are overtly built into the material to guide the teachers in actualization of the skills.

Specific Objectives of Listening

Students are expected to develop the ability:

- to listen to lectures and talks and to be able to extract relevant and useful information for a specific purpose.

- to listen to news bulletins and to develop the ability to discuss informally on a wide ranging issues like current national and international affairs, sports, business, etc.
- to respond in interviews and to participate in formal group discussions.
- to make enquiries meaningfully and adequately and to respond to enquiries for the purpose of travelling within the country and abroad.
- to listen to business news and to be able to extract relevant important information.
- to develop the art of formal public speaking.

Guidelines for Assessment in Listening and Speaking Skills

A. Activities:

- Activities for listening and speaking available at www.cbseacademic.in are to be used for developing listening and speaking skills of students.
- Subject teachers should also refer to books prescribed in the syllabus.
- In addition to the above, teachers may create their own material for assessing the listening and speaking skills.

B. Parameters for Assessment:

The listening and speaking skills are to be assessed on the following parameters:

- i. Interactive competence (Initiation & turn taking, relevance to the topic).
- ii. Fluency (cohesion, coherence and speed of delivery).
- iii. Pronunciation
- iv. Language (accuracy and vocabulary).

C. Schedule:

- The practice of listening and speaking skills should be done throughout the academic year.
- The final assessment of the skills is to be done as per the convenience and schedule of the school.

D. Record keeping:

The record of the activities done and the marks given must be kept for three months after the declaration of result of class XI, for any random checking by the Board.

No recording of speaking skills is to be done.

Specific Objectives of Writing

- to write letters to friends, pen friends, relatives, etc.
- to write business and official letters.
- to send faxes, e-mails[formal].
- to open accounts in post offices and banks.
- to fill in railway/airline reservation forms.
- to write on various issues to institutions seeking relevant information, lodge complaints, express thanks or tender apology.
- to write applications, fill in application forms, prepare a personal bio-data for admission into colleges, universities, entrance tests and jobs.
- to write informal reports as part of personal letters on functions, programmes and activities held in school (morning assembly, annual day, sports day, etc.)
- to write formal reports for school magazines/events/processes/ or in local newspapers about events or occasions.

- to express opinions, facts, arguments in the form a speech or debates.
- to draft papers to be presented in symposia.
- to take down notes from talks and lectures.
- to write examination answers according to the requirement of various subjects.
- to summarise a text.

About Reading

Inculcating good reading habits in children has always been a concern for all stakeholders in education. The purposes to create independent thinking individuals with the ability to not only create their own knowledge but also critically interpret, analyse and evaluate it with objectivity and fairness. This will also help students in learning and acquiring better language skills.

Creating learners for the 21st century involves making them independent learners who can learn, unlearn and relearn and, if our children are in the habit of reading, they will learn to reinvent themselves and deal with the many challenges that lie ahead of them.

Reading is not merely decoding information or pronouncing words correctly. It is an interactive dialogue between the author and the reader in which the reader and the author share their experiences and knowledge with each other. Good readers are critical readers with an ability to arrive at a deeper understanding of not only the world presented in the book but also of the real world around them.

Consequently, they become independent thinkers capable of taking their own decisions in life rationally. Hence, a few activities are suggested below which teachers may use as a part of the reading project.

- Short review
- Dramatization of the story
- Commentary on the characters
- Critical evaluation of the plot, storyline and characters
- Comparing and contrasting the characters within the story and with other characters in stories by the same author or by the other authors
- Extrapolating about the story read or life of characters after the story ends defending characters actions in the story
- Making an audio story out of the novel/text to be read aloud.
- Interacting with the author
- Holding a literature fest where students role-play as various characters to interact with each other
- Role playing as authors/poets/dramatists, to defend their works and characters
- Symposiums and seminars for introducing a book, an author, or a theme
- Creating graphic novels out of novel or short stories they read
- Dramatizing incidents from a novel or a story
- Creating their own stories
- Books of one genre to be read by the whole class.

Teachers may select books suitable to the age and level of the learners. Care ought to be taken to choose books that are appropriate in terms of language, theme and content and which do not hurt the sensibilities of a child.

Teachers may later suggest books from other languages but dealing with the same themes as an extended activity. The Project should lead to independent learning/reading skills and hence the chosen book should not be taught in class, but may be introduced through activities and be left for the students to read at their own pace. Teachers may, however, choose to assess a student's progress or success in reading the book by asking for verbal or written progress reports, looking at their diary entries, engaging in a discussion about the book, giving a short quiz or a work sheet about the book/short story. The mode of assessment may be decided by the teachers as they see fit.

These may be used for internal assessments only. It may be noted that this reading project is apart from the long reading texts which have been prescribed for the Term-end Assessments.

Methods and Techniques

The techniques used for teaching should promote habits of self-learning and reduce dependence on the teacher. In general, we recommend a multi-skill, learner-centred, activity based approach, of which there can be many variations. The core classroom activity is likely to be that of silent reading of prescribed/selected texts for comprehension, which can lead to other forms of language learning activities such as role-play, dramatization, group discussion, writing, etc., although many such activities could be carried out without the preliminary use of textual material. It is important that students be trained to read independently and intelligently, interacting actively with texts, with the use of reference materials (dictionary, thesaurus, etc.) where necessary. Some pre-reading activity will generally be required, and the course books should suggest suitable activities, leaving teachers free to devise other activities when desired. So also, the reading of texts should be followed by post reading activities. It is important to remember that every text can generate different readings. Students should be encouraged to interpret texts in different ways.

Group and pair activities can be resorted to when desired, but many useful language activities can be carried out individually. In general, teachers should encourage students to interact actively with texts and with each other. Oral activity (group discussion, etc.) should be encouraged.

ENGLISH CORE (CODE NO. 301)
CLASS – XI
(2018-19)

SECTION – A

READING COMPREHENSION

45 Periods

Very short answer +/- Short answer and MCQ type questions:

Two unseen passages (including poems) with a variety of questions including 04 marks for vocabulary such as word formation and inferring meaning.

The total range of the 2 passages including a poem or a stanza, should be around 900-1000 words.

1. 550-600 words in length (for note-making and summarising)
2. 350-400 words in length (to test comprehension, interpretation and inference)

An unseen poem of about 28-35 lines.

The passages could be of any one of the following types:

- **Factual passages**, e.g., illustrations, description, reports
- **Discursive passages** involving opinion, e.g., argumentative, persuasive
- **Literary passages** e.g. extracts from fiction, biography, autobiography, travelogue, etc. In the case of a poem, the text may be shorter than the prescribed word limit.

SECTION B
WRITING SKILLS AND GRAMMAR

Writing

60 Periods

Short Answer Questions: Based on notice/ poster/ advertisement

- **Long Answer Questions:** Letters based on verbal/visual input. It would cover all types of letters.
- **Letter types may include:**
 - (a) business or official letters (for making enquiries, registering complaints, asking for and giving information, placing orders and sending replies)
 - (b) letters to the editor (giving suggestions/opinions on an issue)
 - (c) application for a job with a bio-data or resumé
 - (d) letter to the school or college authorities, regarding admissions, school issues, requirements / suitability of courses, etc.
- **Very Long Answer Question:** Composition in the form of article, speech, report writing or a narrative

GRAMMAR

Different grammatical structures in meaningful contexts will be tested. Item types will include gap filling, sentence re-ordering, dialogue completion and sentence transformation. The grammar syllabus will include determiners, tenses, clauses, modals and Change of Voice. These grammar areas will be tested using the following **short answer type and MCQ type questions**.

- Error Correction, editing tasks,
- Re - ordering of sentences,
- Transformation of sentences

SECTION C

LITERATURE AND LONG READING TEXTS/NOVELS

70 Periods

Questions to test comprehension at different levels: literal, inferential and evaluative

1. **Hornbill:** Textbook published by NCERT, New Delhi
2. **Snapshots:** Supplementary Reader published by NCERT, New Delhi

The following have been deleted:

Textbooks

Hornbill

Name of the lessons deleted

1. Landscape of the Soul
2. The Adventure
3. Silk Road
4. The Laburnum Top (Poetry)
5. The Ghat of the only World

Snapshots

- **Very Short Answer Questions** - Based on an extract from poetry to test reference to context comprehension and appreciation.
- **Short Answer Questions** - Based on prose, poetry and plays from both the texts.
- **Long Answer Question** - Based on prescribed texts to test global comprehension and extrapolation beyond the texts to bring out the key messages and values.
- **Long Answer Questions** - Based on theme, plot, incidents or events from the prescribed novels.
- **Long Answer Question** - Based on understanding appreciation, analysis and interpretation of the characters.

Note: Values-based questions may be given as long answers in the writing or literature sections.

Extended Reading Texts: (either one)

With a view to inculcate the habit of reading among the students, CBSE has introduced compulsory reading of a Long Reading Text - Novel in the English Core Course which will be evaluated in the Term-end Assessments. Schools can opt for either one of the texts.

Author

i) **The Canterville Ghost**

Oscar Wilde (unabridged 1906 Edition)

ii) **Up from Slavery**

Booker T. Washington (unabridged 2000 Edition)

Assessment of Listening and Speaking Skills**45 Periods**

It is recommended that listening and speaking skills should be regularly practiced in the class.

QUESTION PAPER DESIGN 2018-19									
CLASS XI									
ENGLISH CORE XI (Code No. 301)			Time: 3 hours				Marks: 80+20=100		
Typology	Typology of questions/ learning outcomes	MCQ 1 mark	Very Short Answer Question 1 mark	Short Answer Question 3 marks	Short Answer Question 4 marks	Long Answer-1 80 - 100 words 5 marks	Long Answer-2 120-150 words 6 marks	Very Long Answer 150 - 200 words (HOTS) 10 marks	Total marks
Reading Skills	Conceptual understanding, decoding, analyzing, inferring, interpreting, appreciating, literary conventions and vocabulary, summarizing and using appropriate format/s	6	6	1	—	1	—	—	20
Writing Skills and Grammar	Reasoning, appropriacy of style and tone, using appropriate format and fluency inference, analysis, evaluation and creativity, appreciation applying of languages conventions, comprehension using structures interactively, accuracy and fluency	—	10	—	1	—	1	1	30
Literary Text books and long reading text /novel	Recalling, reasoning, appreciating a literary conventions, inference, analysis, evaluation, creativity with fluency	—	3	3	—	—	3	—	30
Assessment of Listening and Speaking Skills	Interaction, reasoning, diction, articulation, clarity, pronunciation and overall fluency	—	—	—	—	4	—	—	20
	TOTAL	6x1=6	19x1=19	4x3=12	1x4=4	5x5=5	4x6=24	1x10=10	100

ANNUAL SYLLABUS BREAK UP

APRIL		
Sr. No.	Name of the Book/Topic	Chapters / Topics
1	Hornbill	: Lesson 1: The Portrait of a Lady
2	Snapshots	: Lesson 1: The Summer of the Beautiful White Horse
3	Writing Skills	: Notice Writing, Informal Letter
4	Grammar	: Tenses
5	Novel	: Introduction & Discussion of Plot, Theme, Settings and main characters
6	Reading Skills	: Unseen Passage

MAY **PERIODIC TEST I** **(Written)**

1	Hornbill	: Poem 1: A Photograph Lesson 2: We're Not Afraid to die...If We Can All Be Together
2	Snapshots	: Lesson 2: The Address
3	Writing Skills	: Letters (Formal), Classified Advertisement
4	Grammar	: Determiners
5	Novel	: Discussion of Lesson 1
6	Reading Skills	: Unseen Passage

JUNE **SUMMER VACATIONS**

JULY		
Sr. No.	Name of the Book/Topic	Chapters / Topics
1	Hornbill	: Lesson 3: Discovering Tut: the Saga Continues Poem 2 : The Voice of the Rain
2	Snapshots	: Lesson 3: Ranga's Marriage
3	Writing Skills	: Article Writing, Speech Writing
4	Grammar	: Active and Passive Voice
5	Novel	: Discussion of Lesson 2 and Lesson 3
6	Reading Skills	: Note Making

AUGUST		
Sr. No.	Name of the Book/Topic	Chapters / Topics
1	Hornbill	: Poem 3: Childhood
2	Snapshots	: Lesson 4: Albert Einstein at School
3	Writing Skills	: Article Writing, Debate Writing
4	Grammar	: Clauses
5	Novel	: Discussion of Lesson 4
6	Reading Skills	: Unseen Passage (Note Making)

SEPTEMBER **HALF-YEARLY EXAMINATION** **(Written + ASL)**

OCTOBER

- | | | |
|---|----------------|---|
| 1 | Hornbill | : Lesson 5: The Ailing Planet: the Green Movement's Role. |
| 2 | Snapshots | : Lesson 5: Mother's Day |
| 3 | Writing Skills | : Speech Writing and Report Writing |
| 4 | Grammar | : Modals |
| 5 | Novel | : Discussion of Lesson 5 |
| 6 | Reading Skills | : Unseen Passage / Note Making |

NOVEMBER

- | | | |
|---|----------------|--------------------------|
| 1 | Hornbill | : Poem 4: Father to Son |
| 2 | Snapshots | : Lesson 7: Birth |
| 3 | Writing Skills | : Report Writing |
| 4 | Grammar | : Editing, Gap Filling |
| 5 | Novel | : Discussion of Lesson 6 |
| 6 | Reading Skills | : Unseen Passage |

DECEMBER

- | | | |
|---|----------------|--|
| 1 | Hornbill | : Lesson 6: The Browning Version |
| 2 | Snapshots | : Lesson 8: The Tale of Melon City |
| 3 | Writing Skills | : Situational Description, Poster Making |
| 4 | Grammar | : Sentence Re-ordering |
| 5 | Novel | : Discussion of Chapter 7 |
| 6 | Reading Skills | : Unseen Passage \ Note Making |

PERIODIC TEST II (Written)

JANUARY Revision

FEBRUARY Annual Examination (Written + ASL)

EXAMINATION SYLLABUS

<u>Sr. No.</u>	<u>EXAMINATION</u>	<u>SYLLABUS</u>
1	PERIODIC TEST I	<p>Hornbill:</p> <ul style="list-style-type: none"> • The Portrait of a Lady • A Photograph <p>Snapshots: The Summer of the Beautiful White Horse</p> <p>Writing Skills</p> <ul style="list-style-type: none"> • Informal Letter, • Notice
2	HALF YEARLY EXAMINATION	<p>Hornbill:</p> <ul style="list-style-type: none"> • The Portrait of a Lady • A Photograph • We're Not Afraid to die... If We Can all Be Together • Discovering Tut: the Saga Continues • Childhood <p>Snapshots:</p> <ul style="list-style-type: none"> • The Summer of the Beautiful White Horse • The Address • Ranga's Marriage <p>Novel Chapter 1 – 3</p> <p>Writing Skills</p> <ul style="list-style-type: none"> • Formal Letter, • Notice • Advertisements • Article • Speech • Debate <p>Reading Skills:</p> <ul style="list-style-type: none"> • Unseen Passage • Note Making
3	PERIODIC TEST II	<p>Hornbill:</p> <ul style="list-style-type: none"> • The Portrait of a Lady • A Photograph • We're Not Afraid to die... If We Can all Be Together • Discovering Tut: the Saga Continues • Childhood • The Ailing Planet – The green moment's rule <p>Snapshots:</p> <ul style="list-style-type: none"> • The Summer of the Beautiful White Horse • The Address • Ranga's Marriage • Albert Einstein at School • Mother's Day <p>Novel Chapter 1 – 5</p> <p>Writing Skills</p> <ul style="list-style-type: none"> • Formal Letter, • Notice • Advertisements • Article • Speech • Debate <p>Reading Skills:</p> <ul style="list-style-type: none"> • Unseen Passage • Note Making
4	ANNUAL EXAMINATION	FULL SYLLABUS

NOTE: There will be a class test and an assignment after every lesson.
Movie on the Novel (The Canterville Ghost) will be shown to the students.

DETAILED SYLLABUS OF MATHEMATICS

OBJECTIVES

The broad objectives of teaching Mathematics at senior school stage intend to help the students:

- To acquire knowledge and critical understanding, particularly by way of motivation and visualization, of basic concepts, terms, principles, symbols and mastery of underlying processes and skills.
- To feel the flow of reasons while proving a result or solving a problem.
- To apply the knowledge and skills acquired to solve problems and wherever possible, by more than one method.
- To develop positive attitude to think, analyze and articulate logically.
- To develop interest in the subject by participating in related competitions.
- To acquaint students with different aspects of Mathematics used in daily life.
- To develop an interest in students to study Mathematics as a discipline.
- To develop awareness of the need for national integration, protection of environment, observance of small
- Family norms, removal of social barriers, elimination of gender biases.
- To develop reverence and respect towards great Mathematicians for their contributions to the field of Mathematics.

COURSE STRUCTURE

One Paper

Three Hours

Max.Marks:100

Units		Marks	No. of Periods
I.	Sets and Functions	29	60
II.	Algebra	37	70
III.	Coordinate Geometry	13	40
IV.	Calculus	06	30
V.	Mathematical Reasoning	03	10
VI.	Statistics and Probability	12	30
	Total	100	240

QUESTION PAPER DESIGN

S.No.	Typology of questions	Learning Outcomes and Testing Competencies	Very Short Answer (1 mark)	Long Answer I (4 Marks)	Long Answer II (6 marks)	Marks	% Weightage
1	Remembering- (Knowledge based simple recall questions, to know specific facts, terms, concepts, principles, or theories, Identify, define, or recite, information)	<ul style="list-style-type: none"> • Reasoning • Analytical Skills • Critical thinking • Derivative 	2	3	1	20	20%
2	Understanding- (Comprehension – to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase information)		2	2	1	16	16%
3	Application (Use abstract information in concrete situation, to apply knowledge to new situations, Use given content to interpret a situation, provide an example, or solve a problem)		1	3	2	25	25%
4	High Order Thinking skills (Analysis & Synthesis- Classify , compare, contrast or differentiate between different pieces of information, Organize and /or integrate unique pieces of information from a variety of sources)		1	2	2	21	21%
5	Evaluation and Multi-Disciplinary- (Appraise, judge, and / or justify the value or worth of a decision or outcome, or to predict outcomes based on values)		--	2+1 (Values based)	1	18	18%
	TOTAL		6x1=6	13x4=52	7x6=42	100	100%

ANNUAL SYLLABUS BREAK UP

APRIL

Chapter 3: Trigonometric Functions

Positive and negative angles. Measuring angles in radians and in degrees and conversion of one into other. Definition of trigonometric functions with the help of unit circle. Truth of the $\sin^2x + \cos^2x=1$, for all x . Signs of trigonometric functions. Domain and range of trigonometric functions and their graphs. Expressing $\sin(x \pm y)$ and $\cos(x \pm y)$ in terms of $\sin x$, $\sin y$, $\cos x$ & $\cos y$ and their simple application. Deducing identities like the following:

$$\begin{aligned}\tan(x \pm y) &= \frac{\tan x \pm \tan y}{1 \mp \tan x \tan y}, \cot(x \pm y) = \frac{\cot x \cot y \mp 1}{\cot y \pm \cot x} \\ \sin x + \sin y &= 2 \sin \frac{x+y}{2} \cos \frac{x-y}{2}, \cos x + \cos y = 2 \cos \frac{x+y}{2} \cos \frac{x-y}{2}, \\ \sin x - \sin y &= 2 \cos \frac{x+y}{2} \sin \frac{x-y}{2}, \cos x - \cos y = -2 \sin \frac{x+y}{2} \sin \frac{x-y}{2}.\end{aligned}$$

Identities related to $\sin 2x$, $\cos 2x$, $\tan 2x$, $\sin 3x$, $\cos 3x$ and $\tan 3x$. General solution of trigonometric equations of the type $\sin q = \sin a$, $\cos y = \cos a$ and $\tan q = \tan a$. Proof applications of sine and cosine formulae.

Chapter 1: Sets

Sets and their representations. Empty set. Finite and Infinite sets. Equal sets. Subsets. Subsets of a set of real numbers especially intervals (with notations). Power set. Universal set. Venn diagrams. Union and Intersection of sets. Difference of sets. Complement of a set. Properties of Complement Sets. Practical Problems based on sets.

MAY - JUNE

Chapter 2: Relations and Functions

Ordered pairs, Cartesian product of sets. Number of elements in the Cartesian product of two finite sets. Cartesian product of the sets of real (upto $\mathbb{R} \times \mathbb{R}$). Definition of relation, pictorial diagrams, domain, co-domain and range of a relation. Function as a special kind of relation from one set to another. Pictorial representation of a function, domain, co-domain and range of a function. Real valued functions, domain and range of these functions: constant, identity, polynomial, rational, modulus, signum and greatest integer functions, with their graphs. Sum, difference, product and quotients of functions.

Chapter 4: Principle of Mathematical Induction

Process of the proof by induction, motivating the application of the method by looking at natural numbers as the least inductive subset of real numbers. The principle of mathematical induction and simple applications.

JULY

Chapter 5: Complex Numbers and Quadratic Equations

Need for complex numbers, especially $\sqrt{-1}$, to be motivated by inability to solve some of the quadratic equations. Algebraic properties of complex numbers. Arg and plane and polar representation of complex numbers. Statement of Fundamental Theorem of Algebra, solution of quadratic equations in the complex number system. Square root of a complex number.

Chapter 6: Linear Inequalities

Linear in equalities. Algebraic solutions of linear inequalities in one variable and their representation on the number line. Graphical solution of linear inequalities in two variables. Graphical solution of system of linear inequalities in two variables.

Chapter 7: Permutation and combination

Fundamental principle of counting. Factorial n . ($n!$) Permutations and combinations, derivation of formulae and their connections, simple applications.

AUGUST

Chapter 8: Binomial Theorem

History, statement and proof of the binomial theorem for positive integral indices.

Pascal's triangle, General and middle term in binomial expansion, simple applications

Chapter 9: Sequences and Series

Sequence and Series: Arithmetic Progression (A.P.). Arithmetic Mean (A.M.) Geometric Progression (G.P.), general term of a G.P., sum of n terms of a G.P., Arithmetic and Geometric series infinite G.P. and its sum, geometric mean (G.M.), relation between A.M. and G.M. Sum to n terms of the special series.

$$\sum_{k=1}^n k, \sum_{k=1}^n k^2 \text{ and } \sum_{k=1}^n k^3$$

Chapter 13: Limits and Derivatives

Derivative introduced as rate of change, both as that of distance function and geometrically. Intuitive idea of limit. Limits of polynomials and rational functions, trigonometric, exponential and logarithmic functions. Definition of derivative, relate it to slope of tangent of a curve, derivative of sum, difference, product and quotient of functions. The derivative of polynomial and trigonometric functions.

SEPTEMBER

Chapter 16: Probability

Random experiments, outcomes, sample spaces (set representation). Events, occurrence of events, 'not', 'and' and 'or' events, exhaustive events, mutually exclusive events, Axiomatic (set theoretic) probability, connections with the theories of earlier classes. Probability of an event, probability of 'not', 'and' and 'or' events.

Chapter 14: Mathematical Reasoning

Mathematically acceptable statements. Connecting words/ phrases - consolidating the understanding of "if and only if (necessary and sufficient) condition", "implies", "and/or", "implied by", "and", "or", "there exists" and their use through variety of examples related to real life and Mathematics. Validating the statements involving the connecting words difference between contradiction, converse and contrapositive.

REVISION FOR HALF YEARLY EXAMINATION

OCTOBER

Chapter 10: Straight Lines

Brief recall of two dimensional geometry from earlier classes. Shifting of origin. Slope of a line and angle between two lines. Various forms of equations of a line: parallel to axis, point-slope form, slope-intercept form, two-point form, intercept form and normal form. General equation of a line. Equation of family of lines passing through the point of intersection of two lines. Distance of a point from a line.

Chapter 11: Conic Sections

Sections of a cone: circles, ellipse, parabola, hyperbola; a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section. Standard equations and simple properties of parabola, ellipse and hyperbola. Standard equation of a circle.

NOVEMBER

Chapter 15: Statistics

Measures of dispersion; mean deviation, variance and standard deviation of ungrouped/grouped data. Analysis of frequency distributions with equal means but different variances.

Chapter 12: Introduction to 3D Geometry

Coordinate axes and coordinate planes in three dimensions. Coordinates of a point in space. Distance between two points and section formula.

Videos On '3D'

DECEMBER

REVISION FOR DECEMBER EXAMINATION

EXAMINATION SYLLABUS

PERIODIC TEST – 1

- Trigonometric Functions
- Sets

HALF YEARLY EXAMINATION

- Trigonometric Functions
- Sets
- Relations & Functions
- Principle of Mathematical Induction
- Complex Numbers & Quadratic Equations
- Linear Inequalities
- Permutations & Combinations
- Binomial Theorem
- Sequences & Series
- Probability

PERIODIC TEST - 2

Full Syllabus

ANNUAL EXAMINATION

Full Syllabus

NOTE: There will be a class test after every chapter.

DETAILED SYLLABUS OF PHYSICS

OBJECTIVES

Senior Secondary stage of school education is a stage of transition from general education to discipline-based focus on curriculum. The present updated syllabus keeps in view the rigour and depth of disciplinary approach as well as the comprehension level of learners. Due care has also been taken that the syllabus is comparable to the international standards. Salient features of the syllabus include:

- Emphasis on basic conceptual understanding of the content.
- Emphasis on use of SI units, symbols, nomenclature of physical quantities and formulations as per international standards.
- Providing logical sequencing of units of the subject matter and proper placement of concepts with their linkage for better learning.
- Reducing the curriculum load by eliminating overlapping of concepts/content within the discipline and other disciplines.
- Promotion of process-skills, problem-solving abilities and applications of Physics concepts.

Besides, the syllabus also attempts to

- Strengthen the concepts developed at the secondary stage to provide firm foundation for further learning in the subject.
- Expose the learners to different processes used in Physics-related industrial and technological applications.
- Develop process-skills and experimental, observational, manipulative, decision making and investigatory skills in the learners.
- Promote problem solving abilities and creative thinking in learners.
- Develop conceptual competence in the learners and make them realize and appreciate the interface of Physics with other disciplines.

PHYSICS (CODE NO. 042)
COURSE STRUCTURE
Class XI (Theory) (2018-19)

Time: 3 hrs.

Max Marks: 70

Units		No. of Periods	Marks	
Unit-I	Physical World and Measurement	10	23	
	Chapter-1: Physical World			
	Chapter-2: Units and Measurements			
Unit-II	Kinematics	24		
	Chapter-3 Motion in a Straight Line			
	Chapter-4 Motion in a Plane			
Unit-III	Laws of Motion	14		
	Chapter-5 Laws of Motion			
Unit-IV	Work, Energy and Power	12		17
	Chapter-6 Work, Energy and Power			
Unit-V	Motion of System of Particles and Rigid Body	18		
	Chapter-7 System of Particles and Rotational Motion			
Unit-VI	Gravitation	12		
	Chapter-8 Gravitation			
Unit-VII	Properties of Bulk Matter	24	20	
	Chapter-9 Mechanical Properties of Solids			
	Chapter-10 Mechanical Properties of Fluids			
	Chapter-11 Thermal Properties of Matter			
Unit-VIII	Thermodynamics	12		
	Chapter-12 Thermodynamics			
Unit-IX	Behaviour of Perfect Gases and Kinetic Theory of Gases	08		
	Chapter-13 Kinetic Theory			
Unit-X	Oscillations and Waves	26		10
	Chapter-14 Oscillations			
	Chapter-15 Waves			
Total		160	70	

PRACTICALS

(Total Periods:60)

The record, to be submitted by the students, at the time of their annual examination, has to include:

- Record of at least 15 Experiments [with a minimum of 8 from section A and 7 from section B], to be performed by the students.
- Record of at least 5 Activities [with a minimum of 2 each from section A and section B], to be performed by the students.
- Report of the project to be carried out by the students.

EVALUATION SCHEME

Time: 3 Hrs

Max. Marks: 30

Two experiments one from each section	8+8 Marks
Practical record (experiment and activities)	6 Marks
Investigatory Project	3 Marks
Viva on experiments, activities and project	5 Marks
Total	30 Marks

QUESTION PAPER DESIGN

Time: 3 Hours

Max. Marks: 70

S. No.	Typology of questions	Very Short Answer-I mark	Short Answer-I 2marks	Short Answer-II 3 marks	Value Based Questions 4 marks	Long Answer (5 marks)	Total marks	% Weightage
1	Remembering - (Knowledge based simple recall questions, to know specific facts, terms, concepts, principles, or theories, Identify, define, or recite, information)	2	1	1	-	-	7	10%
2	Understanding- (Comprehension – to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase information)	-	2	4	-	1	21	30%
3	Application (Use abstract information in concrete situation, to apply knowledge to new situation, Use given content to interpret a situation, provide an example, or solve a problem)	-	2	4	-	1	21	30%
4	High Order Thinking skills (Analysis & Synthesis- Classify, compare, contrast or differentiate between different pieces of information, Organize and /or integrate unique pieces of information from a variety of sources)	2	-	1	-	1	10	14%
5	Evaluation and Multi-Disciplinary- (Appraise, judge, and / or justify the value or worth of a decision or outcome, or to predict outcomes based on value)	1	-	2	1	-	11	16%
TOTAL		5x1=5	5x2=10	12x3=36	1x4=4	3x5=15	70(26)	100%

QUESTION WISE BREAK UP

Total no. of Questions	Marks(s) per Question	Total no. of Questions	Total Marks
VSA	1	5	05
SA – I	2	5	10
SA – II	3	12	36
VBQ	4	1	04
LA	5	3	15
Total		26	70

1. Internal Choice: There is no overall choice in the paper. However, there is an internal choice in one question of 2 marks weightage, one question of 3 marks weightage and all the three questions of 5 marks weightage.
2. The above template is only a sample. Suitable internal variations may be made for generating similar templates keeping the overall weightage to different form of questions and typology of questions same.

CURRICULUM PLAN
SUBJECT: PHYSICS **SESSION (2018-19)**

Mon	Topic	Sub Topics	Practical / Activity
April	Unit: I Physical World and Measurement	<p>Physics - scope and excitement; nature of physical laws; Physics, technology and society.</p> <p>Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units. Length, mass and time measurements; accuracy and precision of measuring instruments; errors in measurement; significant figures.</p> <p>Dimensions of physical quantities, dimensional analysis and its applications.</p>	<p>Videos: Physics scope and excitement, Applications of dimensional analysis.</p> <ul style="list-style-type: none"> <input type="checkbox"/> To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Callipers and hence find its volume. <input type="checkbox"/> To measure diameter of a given wire and thickness of a given sheet using screw gauge. <input type="checkbox"/> To determine volume of an irregular lamina using screw gauge. <input type="checkbox"/> To determine radius of curvature of a given spherical surface by a spherometer.
May	Periodic Test: I		

Mon	Topic	Sub Topics	Practical / Activity
May to June	Unit: II Kinematics	<p>Frame of reference, Motion in a straight line: Position-time graph, speed and velocity. Elementary concepts of differentiation and integration for describing motion. Uniform and non-uniform motion, average speed and instantaneous velocity. Uniformly accelerated motion, velocity-time and position-time graphs. Relations for uniformly accelerated motion (graphical treatment).</p> <p>Scalar and vector quantities; Position and displacement vectors, general vectors and their notations; equality of vectors, multiplication of vectors by a real number; addition and subtraction of vectors. Relative velocity. Unit vector; Resolution of a vector in a plane rectangular components. Scalar and Vector product of vectors. Motion in a plane. Cases of uniform velocity and uniform acceleration-projectile motion. Uniform circular motion.</p>	<p>Video: Types of vectors, Relative velocity, Projectile motion, Circular motion</p> <ul style="list-style-type: none"> <input type="checkbox"/> To determine the mass of two different objects using a beam balance. <input type="checkbox"/> To find the weight of a given body using parallelogram law of vectors. <input type="checkbox"/> Using a simple pendulum, plot L-T and L-T² graphs. Hence find the effective length of second's pendulum using appropriate graph. <input type="checkbox"/> To study variation of time period of a simple pendulum by changing its length and taking bobs of different masses independently and interpret the result.

Mon	Topic	Sub Topics	Practical / Activity
July	Unit: III Laws of Motion	<p>Intuitive concept of force. Inertia, Newton's first law of motion; momentum and Newton's second law of motion; impulse; Newton's third law of motion.</p> <p>Law of conservation of linear momentum and its applications. Equilibrium of concurrent forces.</p> <p>Static and kinetic friction, laws of friction, rolling friction, lubrication. Dynamics of uniform circular motion: Centripetal force, examples of circular motion (vehicle on a level circular road, vehicle on banked road).</p>	<p>Videos:</p> <p>Conservation of momentum and its applications, Friction, Examples of circular motion.</p> <p>□ To study the relationship between force of limiting friction and normal reaction and to find the coefficient of friction between a block and a horizontal surface</p>
	Unit: IV Work, Energy and Power	<p>Work done by a constant force and a variable force; kinetic energy, work-energy theorem, power.</p> <p>Notion of potential energy, potential energy of a spring, conservative forces: conservation of mechanical energy (kinetic and potential energies); non-conservative forces: motion in a vertical circle; elastic and inelastic collisions in one and two dimensions.</p>	<p>Videos:</p> <p>Conservation of mechanical energy, Collisions and its types.</p>

Mon	Topic	Sub Topics	Practical / Activity
September	Unit VII: Properties of Bulk Matter	Elastic behaviour, Stress-strain relationship, Hooke's law, Young's modulus, bulk modulus, shear modulus of rigidity, Poisson's ratio; elastic energy. Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes). Effect of gravity on fluid pressure.	<input type="checkbox"/> To determine Young's modulus of elasticity of the material of a given wire. <input type="checkbox"/> To find the force constant of a helical spring by plotting a graph between load and extension.
October	Unit VII: Properties of Bulk Matter (Contd.)	<p>Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes). Effect of gravity on fluid pressure.</p> <p>Viscosity, Stokes' law, terminal velocity, streamline and turbulent flow, critical velocity. Bernoulli's theorem and its applications.</p> <p>Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, application of surface tension ideas to drops, bubbles and capillary rise.</p> <p>Heat, temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; C_p, C_v - calorimetry; change of state -latent heat capacity.</p> <p>Heat transfer-conduction, convection and radiation, thermal conductivity, Qualitative ideas of Blackbody radiation, Wein's displacement Law, Stefan's law, Greenhouse effect.</p>	<p>Videos: Types of Modulus, Pascal's law and its applications, Surface energy and Surface tension, Capillarity.</p> <input type="checkbox"/> To determine the surface tension of water by capillary rise method. <input type="checkbox"/> To study the variation in volume with pressure for a sample of air at constant temperature by plotting graphs between P and V, and between P and 1/V. <p>Videos: Heat transfer and its types, Blackbody radiation, Greenhouse effect.</p> <input type="checkbox"/> To determine the coefficient of viscosity of a given viscous liquid by measuring terminal velocity of a given spherical body. <input type="checkbox"/> To study the relationship between the temperature of a hot body and time by plotting a cooling curve. <input type="checkbox"/> To determine specific heat capacity of a given (i) Solid, (ii) liquid, by method of mixtures.

Mon	Topic	Sub Topics	Practical / Activity
November	Unit: VIII Thermodynamics	Thermal equilibrium and definition of temperature (zeroth law of thermodynamics). Heat, work and internal energy. First law of thermodynamics. Isothermal and adiabatic processes. Second law of thermodynamics: reversible and irreversible processes. Heat engine and refrigerator.	Videos: Isothermal and Adiabatic processes, Heat engine and refrigerator.
	Unit: IX Behaviour of Perfect Gases and Kinetic Theory of Gases	Equation of state of a perfect gas, work done in compressing a gas. Kinetic theory of gases - assumptions, concept of pressure. Kinetic interpretation of temperature; rms speed of gas molecules; degrees of freedom, law of equi-partition of energy (statement only) and application to specific heat capacities of gases; concept of mean free path, Avogadro's number.	
December	PERIODIC TEST-II		

Mon	Topic	Sub Topics	Practical / Activity
January	Unit: X Oscillations and Waves	<p>Periodic motion - time period, frequency, displacement as a function of time. Periodic functions.</p> <p>Simple harmonic motion (S.H.M) and its equation; phase; oscillations of a spring-restoring force and force constant; energy in S.H.M. Kinetic and potential energies; simple pendulum derivation of expression for its time period. Free, forced and damped oscillations (qualitative ideas only), resonance.</p> <p>Wave motion. Transverse and longitudinal waves, speed of wave motion. Displacement relation for a progressive wave. Principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats, Doppler effect.</p>	<p>Videos: Free, forced and damped oscillations, Resonance, Transverse and Longitudinal waves, Beats and Doppler effect.</p> <p><input type="checkbox"/> To study the relation between frequency and length of a given wire under constant tension using sonometer.</p> <p style="text-align: center;">Or</p> <p><input type="checkbox"/> To study the relation between the length of a given wire and tension for constant frequency using sonometer.</p> <p><input type="checkbox"/> To find the speed of sound in air at room temperature using a resonance tube by two resonance positions.</p>
February	ANNUAL EXAMINATION		

EXAMINATION SYLLABUS

<u>PERIODIC TEST 1:</u>	Unit 1 (Chapters 1 & 2), Unit 2 (Chapter – 3)
<u>HALF YEARLY EXAMINATION:</u>	Units 1 to 5
<u>PERIODIC TEST 2:</u>	Units 1 to 9
<u>ANNUAL EXAMINATION:</u>	Full Syllabus (Units 1 to 10)

NOTE: There will be a class test and assignment after every chapter.

DETAILED SYLLABUS OF CHEMISTRY

OBJECTIVES

- To promote understanding of basic facts and concepts in chemistry while retaining the excitement of chemistry.
- To make students capable of studying chemistry in academic and professional courses (such as medicine, engineering, technology) at tertiary level.
- To expose the students to various emerging new areas of chemistry and apprise them with their relevance in future studies and their application in various spheres of chemical sciences and technology.
- To equip students to face various challenges related to health, nutrition, environment, population, weather, industries and agriculture.
- To develop problem solving skills in students.
- To expose the students to different processes used in industries and their technological applications to apprise students with interface of chemistry with other disciplines of science such as physics, biology, geology, engineering etc.
- To acquaint students with different aspects of chemistry used in daily life.
- To develop an interest in students to study chemistry as a discipline.

CLASS-XI (THEORY) (2018-19) COURSE STRUCTURE

Total Periods (Theory 160+ Practical 60)

Time: 3 Hours

Total Marks 70

Unit No.	Title	No. of Periods	Marks
Unit I	Some Basic Concepts of Chemistry	08	08
Unit II	Structure of Atom	10	
Unit III	Classification of Elements and Periodicity in Properties	06	04
Unit IV	Chemical Bonding and Molecular Structure	14	20
Unit V	States of Matter: Gases, Liquids and solids	18	
Unit VI	Chemical Thermodynamics	16	
Unit VII	Equilibrium	14	
Unit VIII	Redox Reactions	06	
Unit IX	Hydrogen	08	20
Unit X	s -Block Elements	10	
Unit XI	p -Block Elements	18	
Unit XII	Organic Chemistry: Some basic Principles and Techniques	14	18
Unit XIII	Hydrocarbons	12	
Unit XIV	Environmental Chemistry	06	
	Total	160	70

PRACTICALS

Evaluation Scheme for Examination	Marks
Volumetric Analysis	8
Salt Analysis	8
Content Based Experiment	6
Project Work	4
Class record and viva	4
Total	30

QUESTION WISE BREAK UP

Type of Question	Mark per Question	Total No. of Questions	Total Marks
VSA	1	5	05
SA-I	2	7	14
SA-II	3	12	36
LA	5	3	15
Total		27	70

1. *Internal Choice: There is no overall choice in the paper. However, there is an internal choice in one question of 2 marks weightage, one question of 3 marks weightage and all the three questions of 5 marks weightage.*
2. *The above template is only a sample. Suitable internal variations may be made for generating similar templates keeping the overall weightage to different form of questions and typology of questions same*

QUESTION PAPER DESIGN

Time 3 Hours

Max. Marks: 70

S.	Typology of Questions	Very Short Answer (VSA) (1 mark)	Short Answer-I (SA-I) (2 marks)	Short Answer - II (SA-II) (3marks)	Long Answer (LA) (5 marks)	Total Marks	% Weightage
1.	Remembering- (Knowledge based Simple recall questions, to know specific facts, terms, concepts, principles, or theories, Identify, define, or recite, information)	2	1	1	-	7	10%
2	Understanding- Comprehension -to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase information)	-	2	4	1	21	30%
3	Application (Use abstract information in concrete situation, to apply knowledge to new situations, Use given content to interpret a situation, provide an example, or solve a problem)	-	2	4	1	21	30%
4	High Order Thinking Skills (Analysis & Synthesis- Classify, compare, contrast, or differentiate between different pieces of information, Organize and/or integrate unique pieces of information from a variety of sources)	2	-	1	1	10	14%
5	Evaluation- (Appraise, judge, and/or justify the value or worth of a decision or outcome, or to predict outcomes based on values)	1	2	2	-	11	16%
	TOTAL	5X1=5	7x2=14	12x3=36	3x5=15	70(27)	100%

ANNUAL SYLLABUS BREAK UP

APRIL

1. **Unit I: Some Basic Concepts of Chemistry** **08 Periods**

General Introduction: Importance and scope of chemistry.

Nature of matter, laws of chemical combination, Dalton's atomic theory: concept of elements, atoms and molecules.

Atomic and molecular masses, mole concept and molar mass, percentage composition, empirical and molecular formula, chemical reactions, stoichiometry and calculations based on stoichiometry.

2. **Unit II: Structure of Atom** **10 Periods**

Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle, concept of orbitals, quantum numbers, shapes of s, p and d orbitals, rules for filling electrons in orbitals - Aufbau principle, Pauli's exclusion principle and Hund's rule, electronic configuration of atoms, stability of half-filled and completely filled orbitals.

PRACTICAL:

A. Basic Laboratory Techniques

1. Cutting glass tube and glass rod
2. Bending a glass tube
3. Drawing out a glass jet
4. Boring a cork

B. Characterization and Purification of Chemical Substances

1. Determination of melting point of an organic compound.
2. Determination of boiling point of an organic compound.
3. Crystallization of impure sample of any one of the following: Alum, Copper Sulphate, Benzoic Acid.

Revision for periodic test 1

MAY-JUNE

Unit III: Classification of Elements and Periodicity in Properties **06 periods**

Modern periodic law and the present form of periodic table, periodic trends in properties of elements -atomic radii, ionic radii, inert gas radii, Ionization enthalpy, electron gain enthalpy, electronegativity, valency. Nomenclature of elements with atomic number greater than 100

Unit IV: Chemical Bonding and Molecular structure **14 periods**

Valence electrons, ionic bond, covalent bond; bond parameters, Lewis structure, polar character of covalent bond, covalent character of ionic bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theory, concept of hybridization, involving s, p and d orbitals and shapes of some simple molecules, molecular orbital theory of homo nuclear diatomic molecules (qualitative idea only), hydrogen bond.

JULY

Unit V: States of Matter: Gases and Liquids

18 periods

Three states of matter, intermolecular interactions, types of bonding, melting and boiling points, role of gas laws in elucidating the concept of the molecule, Boyle's law, Charles law, Gay Lussac's law, Avogadro's law, ideal behaviour, empirical derivation of gas equation, Avogadro's number, ideal gas equation. Deviation from ideal behaviour, liquefaction of gases, critical temperature, kinetic energy and molecular speeds (elementary idea).

Liquid State- vapour pressure, viscosity and surface tension (qualitative idea only, no mathematical derivations).

Solid state: Classification of solids based on different binding forces: molecular, ionic, covalent and metallic solids, amorphous and crystalline solids (elementary idea).

Unit cell in two dimensional and three dimensional lattices, calculation of density of unit cell, packing in solids, packing efficiency, voids, number of atoms per unit cell in a cubic unit cell, point defects, electrical and magnetic properties.

PRACTICAL:

E. Quantitative Estimation

1. Using a chemical balance.
2. Preparation of standard solution of Oxalic acid.
3. Determination of strength of a given solution of Sodium Hydroxide by titrating it against standard solution of Oxalic acid.
4. Preparation of standard solution of Sodium Carbonate.
5. Determination of strength of a given solution of Hydrochloric acid by titrating it against standard Sodium Carbonate solution.

AUGUST

Unit VI: Chemical Thermodynamics

16 periods

Concept of System and types of system, surroundings, work, heat, energy, extensive and intensive properties, state functions. First law of thermodynamics -internal energy and enthalpy, heat capacity and specific heat, measurement of ΔU and ΔH , Hess's law of constant heat summation, enthalpy of bond dissociation, combustion, formation, atomization, sublimation, phase transition, ionization, solution and dilution. Second law of Thermodynamics (brief introduction) Introduction of entropy as a state function, Gibb's energy change for spontaneous and non-spontaneous processes, criteria for equilibrium. Third law of thermodynamics (brief introduction)

Third law of thermodynamics (brief introduction).

Unit VII: Equilibrium

14 periods

Equilibrium in physical and chemical processes, dynamic nature of equilibrium, law of mass action, equilibrium constant, factors affecting equilibrium - Le Chatelier's principle, ionic equilibrium- ionization of acids and bases, strong and weak electrolytes, degree of ionization, ionization of poly basic acids, acid strength, concept of pH, Henderson Equation, hydrolysis of salts (elementary idea), buffer solution, solubility product, common ion effect (with illustrative examples).

Revision for Half Yearly Exam

PRACTICAL

D. Chemical Equilibrium

One of the following experiments:

- a) Study the shift in equilibrium between ferric ions and thiocyanate ions by increasing/decreasing the concentration of either of the ions.
- b) Study the shift in equilibrium between $[\text{Co}(\text{H}_2\text{O})_6]^{2+}$ and chloride ions by changing the concentration of either of the ions.

PRACTICAL

C. Experiments based on pH

(a) Any one of the following experiments:

1. Determination of pH of some solutions obtained from fruit juices, solution of known and varied concentrations of acids, bases and salts using pH paper or universal indicator.
2. Comparing the pH of solutions of strong and weak acids of same concentration.
3. Study the pH change in the titration of a strong base using universal indicator.

(b) Study the pH change by common-ion in case of weak acids and weak bases.

SEPTEMBER

Unit VIII: Redox Reactions

06 periods

Concept of oxidation and reduction, redox reactions, oxidation number, balancing redox reactions, in terms of loss and gain of electrons and change in oxidation number, applications of redox reactions.

OCTOBER

Unit IX: Hydrogen

08 periods

Position of hydrogen in periodic table, occurrence, isotopes, preparation, properties and uses of hydrogen, hydrides-ionic, covalent and interstitial; physical and chemical properties of water, heavy water, hydrogen peroxide -preparation, reactions and structure and use; hydrogen as a fuel.

Unit X: s-Block Elements (Alkali and Alkaline Earth Metals)

10 periods

Group 1 and Group 2 Elements

General introduction, electronic configuration, occurrence, anomalous properties of the first element of each group, diagonal relationship, trends in the variation of properties (such as ionization enthalpy, atomic and ionic radii), trends in chemical reactivity with oxygen, water, hydrogen and halogens, uses.

Preparation and Properties of Some Important Compounds:

Sodium Carbonate, Sodium Chloride, Sodium Hydroxide and Sodium Hydrogen Carbonate, Biological importance of Sodium and Potassium.

Calcium Oxide and Calcium Carbonate and their industrial uses, biological importance of Magnesium and Calcium.

PRACTICAL

F. Qualitative Analysis

Cations- Pb^{2+} , Cu^{2+} , Al^{3+} , Fe^{3+} , Mn^{2+} , Ni^{2+} , Zn^{2+} , Co^{2+} , Ca^{2+} , Sr^{2+} , Ba^{2+} , Mg^{2+}

Anions - CO_3^{2-} , S^{2-} , SO_3^{2-} , SO_4^{2-} , NO_2^- , Cl^- , Br^- , I^- , PO_4^{3-} , $\text{C}_2\text{O}_4^{2-}$, CH_3COO^-

(Note: Insoluble salts excluded)

(b) Detection of -Nitrogen, Sulphur, Chlorine in organic compounds.

NOVEMBER

Unit XI: Some p -Block Elements

18 periods

General Introduction to p -Block Elements

Group 13 Elements: General introduction, electronic configuration, occurrence, variation of properties, oxidation states, trends in chemical reactivity, anomalous properties of first elements of the group, Boron - physical and chemical properties, some important compounds, Borax, Boric acid, Boron Hydrides, Aluminum: Reactions with acids and alkalis, uses.

Group 14 Elements: General introduction, electronic configuration, occurrence, variation of properties, oxidation states, trends in chemical reactivity, anomalous behaviour of first elements. Carbon-catenation, allotropic forms, physical and chemical properties, uses of some important compounds, oxides; Important compounds of Silicon and a few uses: Silicon Tetrachloride, Silicones, Silicates and Zeolites, their uses.

DECEMBER

Unit XI: Some p -Block Elements (Continued)

Group -15 Elements: General introduction, electronic configuration, occurrence, oxidation states, trends in physical and chemical properties; Nitrogen preparation properties and uses; compounds of Nitrogen, preparation and properties of Ammonia and Nitric Acid, Oxides of Nitrogen (Structure only) ; Phosphorus - allotropic forms, compounds of Phosphorus: Preparation and Properties of Phosphine, Halides and Oxoacids (elementary idea only).

Unit XII: Organic Chemistry -Some Basic Principles and Techniques 14 periods

General introduction, methods of purification, qualitative and quantitative analysis, classification and IUPAC nomenclature of organic compounds. Electronic displacements in a covalent bond: inductive effect, electrometric effect, resonance and hyperconjugation. Homolytic and heterolytic fission of a covalent bond: free radicals, carbocations, carbanions, electrophiles and nucleophiles, types of organic reactions.

JANUARY

Unit XIII: Hydrocarbons

12 periods

Classification of Hydrocarbons

Aliphatic Hydrocarbons: Alkanes - Nomenclature, isomerism, conformation (ethane only), physical properties, chemical reactions including free radical mechanism of halogenation, combustion and pyrolysis.

Alkenes - Nomenclature, structure of double bond (ethene), geometrical isomerism, physical properties, methods of preparation, chemical reactions: addition of hydrogen,

halogen, water, hydrogen halides (Markownikov's addition and peroxide effect), ozonolysis, oxidation, mechanism of electrophilic addition.

Alkynes - Nomenclature, structure of triple bond (ethyne), physical properties, methods of preparation, chemical reactions: acidic character of alkynes, addition reaction of - hydrogen, halogens, hydrogen halides and water.

Aromatic Hydrocarbons: Introduction, IUPAC nomenclature, benzene: resonance, aromaticity, chemical properties: mechanism of electrophilic substitution. Nitration, sulphonation, halogenation, Friedel Craft's alkylation and acylation, directive influence of functional group in monosubstituted benzene. Carcinogenicity and toxicity.

Unit XIV: Environmental Chemistry

06 periods

Environmental pollution - air, water and soil pollution, chemical reactions in atmosphere, smog, major atmospheric pollutants, acid rain, ozone and its reactions, effects of depletion of ozone layer, greenhouse effect and global warming- pollution due to industrial wastes, green chemistry as an alternative tool for reducing pollution, strategies for control of environmental pollution.

Revision for Final Examination

FEBRUARY

Final exams

EXAMINATION SYLLABUS

PERIODIC TEST 1: Unit 1,2

HALF YEARLY EXAMINATION: Units 1 to 7

PERIODIC TEST 2: Units 1 to 11 (Chapter 11 till group 14)

FINAL EXAMINATION: Full Syllabus

NOTE: There will be a class test and assignment after every chapter.

DETAILED SYLLABUS OF BIOLOGY

OBJECTIVES

The prescribed syllabus is expected to:

- Promote understanding of basic principles of Biology.
- Encourage learning of emerging knowledge and its relevance to individual and society.
- Promote rational/scientific attitude to issues related to population, environment and development.
- Enhance awareness about environmental issues, problems and their appropriate solutions.
- Create awareness amongst the learners about diversity in the living organisms and developing respect for other living beings.
- Appreciate that the most complex biological phenomena are built on essentially simple processes.

COURSE STRUCTURE (THEORY)

Time: 3 Hours

Max. Marks: 70

Unit	Title	Marks	No. of Periods
1.	Diversity of Living Organism	07	23
2.	Structural Organisations in Plants and Cell :	12	22
3.	Structure and Function	15	35
4.	Plant Physiology	18	40
5.	Human Physiology	18	40
Total		70	160

PRACTICALS

Evaluation Scheme	Maximum Marks : 30
One Major Experiment Part A (Expt No. 1, 3, 7, 8)	5 marks
One Minor Experiment Part A (Expt No. 6, 9, 10, 11, 12, 13)	4 marks
Slide Preparation Part A (Expt No. 2, 4, 5)	5 marks
Spotting Part B	7 marks
Practical record + viva Voce	4 marks
Project record + viva Voce	5 marks
Total	30 marks

A. List of Experiments

1. Study and description of three locally available common flowering plants, one from each of the families Solanaceae, Fabaceae and Liliaceae (Poaceae, Asteraceae or Brassicaceae can be substituted in case of particular geographical location) including dissection and display of floral whorls, anther and ovary to show number of chambers (floral formulae and floral diagrams). Types of root (Tap and adventitious); stem (herbaceous and woody); leaf (arrangement, shape, venation, simple and compound).
2. Preparation and study of T.S. of dicot and monocot roots and stems (primary).
3. Study of osmosis by potato osmometer.
4. Study of plasmolysis in epidermal peels (e.g. Rhoeo leaves).
5. Study of distribution of stomata in the upper and lower surface of leaves.
6. Comparative study of the rates of transpiration in the upper and lower surface of leaves.
7. Test for the presence of sugar, starch, proteins and fats. Detection in suitable plant and animal materials.
8. Separation of plant pigments through paper chromatography.
9. Study of the rate of respiration in flower buds/leaf tissue and germinating seeds. 10. Test for presence of urea in urine.
11. Test for presence of sugar in urine.
12. Test for presence of albumin in urine.
13. Test for presence of bile salts in urine.

B. Study/observation of the following (spotting)

1. Study of the parts of a compound microscope.
2. Study of the specimens/slides/models and identification with reasons - Bacteria, Oscillatoria, Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen.
3. Study of virtual specimens/slides/models and identification with reasons - Amoeba, Hydra, liverfluke, Ascaris, leech, earthworm, prawn, silkworm, honeybee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit.
4. Study of tissues and diversity in shapes and sizes of plant and animal cells (palisade cells, guard cells, parenchyma, collenchyma, sclerenchyma, xylem, phloem, squamous epithelium, muscle fibers and mammalian blood smear) through temporary/permanent slides.
5. Study of mitosis in onion root tip cells and animals cells (grasshopper) from permanent slides.
6. Study of different modifications in roots, stems and leaves.
7. Study and identification of different types of inflorescence (cymose and racemose).
8. Study of imbibition in seeds/raisins.
9. Observation and comments on the experimental set up for showing: a) Anaerobic respiration b) Phototropism c) Effect of apical bud removal d) Suction due to transpiration
10. Study of human skeleton and different types of joints with the help of virtual images/models only.
11. Study of external morphology of cockroach through virtual images/models

QUESTION PAPER DESIGN

Time 3 Hours

Max. Marks :70

S.No.	Typology of questions	Very Short Answer (VSA) I mark	Short Answer-I 2 marks	Short Answer-II 3 marks	Value Based Questions 4 marks	Long Answer 5 marks	Total marks	% Weightage
1	Remembering- (Knowledge based simple recall questions to know specific facts, terms, concepts, principles theories, identify, define or recite, information)	2	1	1	-	-	7	10%
2	Understanding- (Comprehension – to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase information)	-	2	4	-	1	21	30%
3	Application (Use abstract information in concrete situation, to apply knowledge to new situations, use given content to interpret a situation, provide an example or solve a problem)	-	2	4	-	1	21	30%
4	High Order Thinking skills (Analysis & Synthesis-Classify, compare, contrast or differentiate between different pieces of information, Organize and or integrate unique pieces of information from a variety of sources)	2	-	1	-	1	10	14%
5	Evaluation and Multi-Disciplinary- (Appraise, judge or justify the value or worth of a decision or outcome or to predict outcomes based on values)	1	-	2	1	-	11	16%
	TOTAL	5x1=5	5x2=10	12x3=36	1x4=4	3x5=15	70 (26)	100%

ANNUAL SYLLABUS BREAK UP

APRIL

Unit I: Diversity of Living Organisms

Chapter 1: The Living World

What is living? Biodiversity: Need for classification, three domains of life, taxonomy and systematic, concept of species and taxonomical hierarchy, binomial nomenclature, tools for study of taxonomy- Museums, zoological parks, herbaria, botanical gardens.

Chapter 2: Biological classification

Five kingdom classification, Salient features and classification of Monera, Protista and Fungi into major groups: Lichens, Viruses and Viroids.

Chapter 3: Plant Kingdom

Salient features and classification of plants into major groups - Algae, Bryophyta, Pteridophyta, Gymnosperms and Angiosperms (three to five salient and distinguishing features and at least two examples of each category). Angiosperms - classification upto class, characteristic features and examples.

Chapter 4: Animal Kingdom

Salient features and classification of animals: Non Chordates up to phyla level and Chordates up to class level (three to five salient features and at least two examples of each category). (No live animals or specimen should be displayed.)

Practicals:

- Study of the parts of a compound microscope.
- Study of the specimens/slides/models and identification with reasons - Bacteria, Oscillatoria, Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen.
- Study of virtual specimens/slides/models and identification with reasons - Amoeba, Hydra, liverfluke, Ascaris, leech, earthworm, prawn, silkworm, honeybee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit.

MAY-JUNE

Unit 2: Structural Organisation in Animals and Plants

Chapter 5: Morphology of flowering Plants

Morphology and modifications, tissues, anatomy and functions of different parts of flowering plants: root, stem, leaf, inflorescence, flower, fruit and seed (to be dealt along with the relevant practical of the Practical Syllabus).

Chapter 6: Anatomy of Flowering Plants

The tissues, tissues systems, anatomy of dicotyledonous and monocotyledonous plants, secondary growth.

A brief account only. (To be dealt along with the relevant practical of the Practical Syllabus).

Chapter 7: Structural organization in Animals

Animal tissues, Morphology, anatomy and functions of different systems (Digestive, Circulatory, Respiratory, Nervous and Reproductive) of an insect (cockroach).

Practicals:

- Study and description of three locally available common flowering plants, one from each of the families Solanaceae, Fabaceae and Liliaceae (Poaceae, Asteraceae or Brassicaceae can be substituted in case of particular geographical location) including dissection and display of floral whorls, anther and ovary to show number of chambers (floral formulae and floral diagrams). Types of root (Tap and adventitious); stem (herbaceous and woody); leaf (arrangement, shape, venation, simple and compound).
- Preparation and study of T.S. of dicot and monocot roots and stems (primary).
- Study of tissues and diversity in shapes and sizes of plant and animal cells (palisade cells, guard cells, parenchyma, collenchyma, sclerenchyma, xylem, phloem, squamous epithelium, muscle fibers and mammalian blood smear) through temporary/permanent slides.
- Study of different modifications in roots, stems and leaves.
- Study and identification of different types of inflorescence
- Study of external morphology of cockroach through virtual images/models

JULY

Unit 3: Cell Structure and Function

Chapter 8: Cell: The Unit of Life

Cell theory and cell as the basic unit of life, Structure of prokaryotic and Eukaryotic cells, Plant cell and animal cell, Cell envelope, cell membrane, cell wall, Cell organelles - structure and function, endomembrane system, endoplasmic reticulum, Golgi bodies, lysosomes, vacuoles, mitochondria, ribosomes, plastids, microbodies, cytoskeleton, cilia, flagella, centrioles (ultrastructure and function), nucleus, nuclear membrane, chromatin, nucleolus.

Video on cell and its structure.

Chapter 9: Biomolecules

Chemical constituents of living cells: biomolecules, structure and function of proteins, carbohydrates, lipids, nucleic acids, enzymes, types, properties, enzyme action.

Video on enzymes (properties and working)

Chapter 10: Cell Cycle and Cell Division

Cell cycle, Mitosis, Meiosis and their significance.

Video on cell division

Practical:

- Study of mitosis in onion root tips and meiosis in grasshopper testes from permanent slides.

AUGUST

Unit 4: Plant Physiology

Chapter 11: Transport in plants

Movement of water, gases and nutrients; cell to cell transport, Diffusion, facilitated diffusion, active transport; plant-water relations, imbibition, water potential, osmosis, plasmolysis
Long distance transport of water - Absorption, apoplast, symplast, transpiration pull, root pressure and guttation; transpiration, opening and closing of stomata, Uptake and translocation of mineral nutrients - Transport of food, phloem transport, mass flow hypothesis, diffusion of gases.

Chapter 12: Mineral nutrition

Essential minerals, macro and micronutrients and their role, deficiency symptoms, mineral toxicity, elementary idea of hydroponics as a method to study mineral nutrition, nitrogen metabolism, nitrogen cycle, biological nitrogen fixation.

Video on nitrogen cycle

Chapter 13: Photosynthesis in higher plants

Photosynthesis as a mean of autotrophic nutrition; site of photosynthesis, pigments involved in photosynthesis (elementary idea), photochemical and biosynthetic phases of photosynthesis, cyclic and non-cyclic photophosphorylation, chemiosmotic hypothesis, photorespiration, C3 and C4 pathways, factors affecting photosynthesis.

Practical:

- Study of osmosis by potato osmometer.
- Study of plasmolysis in epidermal peels (e.g. Rhoeo leaves).
- Study of distribution of stomata in the upper and lower surface of leaves.
- Comparative study of the rates of transpiration in the upper and lower surface of leaves.
- Separation of plant pigments through paper chromatography.

SEPTEMBER

Chapter 14: Respiration in Plants

Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic), energy relations - number of ATP molecules generated; amphibolic pathways, respiratory quotient.

Practical:

- Study of the rate of respiration in flower buds/leaf tissue and germinating seeds.
- Study of imbibition in seeds/ raisins.

OCTOBER

Chapter 15: Plant growth and development

Seed germination, phases of plant growth and plant growth rate, conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes in a plant cell, growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA, seed dormancy, vernalisation, photoperiodism.

Video on seed germination

Practical:

- Observation and comment on the experimental setup anaerobic respiration, phototropism, apical bud removal, suction due to transpiration.

Unit 5: Human Physiology

Chapter 16: Digestion and absorption

Alimentary canal and digestive glands, role of digestive enzymes and gastrointestinal hormones; Peristalsis, digestion, absorption and assimilation of proteins, carbohydrates and fats, calorific values of proteins, carbohydrates and fats, egestion, nutritional and digestive disorders - PEM, indigestion, constipation, vomiting, jaundice, diarrhoea.

Video on working of digestive system

Chapter 17: Breathing and Exchange of gases

Respiratory organs in animals (recall only); Respiratory system in humans; mechanism of breathing and its regulation in humans - exchange of gases, transport of gases and regulation of respiration, respiratory volume; disorders related to respiration - asthma, emphysema, occupational respiratory disorders.

Practical:

- Test for the presence of sugar, starch, proteins and fats. Detection in suitable plant and animal materials.

NOVEMBER

Chapter 18: Body fluids and circulation

Composition of blood, blood groups, coagulation of blood; composition of lymph and its function; human circulatory system - Structure of human heart and blood vessels, cardiac cycle, cardiac output, ECG, double circulation; regulation of cardiac activity; disorders of circulatory system - hypertension, coronary artery disease, angina pectoris, heart failure

Video on cardiovascular disorders.

Chapter 19: Excretory products and their elimination

Modes of excretion - ammonotelism, ureotelism, uricotelism; human excretory system - structure and function; urine formation, osmoregulation; regulation of kidney function - renin - angiotensin, atrial natriuretic factor, ADH and diabetes insipidus; role of other organs in excretion; disorders - uraemia, renal failure, renal calculi, nephritis; dialysis and artificial kidney.

Chapter 20: Locomotion and movement

Types of movement - ciliary, flagellar, muscular; skeletal muscle- contractile proteins and muscle contraction; skeletal system and its functions; joints; disorders of muscular and skeletal system - myasthenia gravis, tetany, muscular dystrophy, arthritis, osteoporosis, gout.

Practical:

- Study of human skeleton and different types of joints.
- To test the presence of urea, albumin, sugar and bile salts in urine.

DECEMBER
REVISION FOR DECEMBER EXAMINATION

JANUARY

Chapter 21: Neural control and coordination

Neuron and nerves; Nervous system in humans - central nervous system, peripheral nervous system and visceral nervous system, generation and conduction of nerve impulse, reflex action, sensory perception, sense organs, elementary structure and functions of eye and ear.

Video on reflex action.

Chapter 22: Chemical coordination and Integration

Endocrine glands and hormones; human endocrine system - hypothalamus, pituitary, pineal, thyroid, parathyroid, adrenal, pancreas, gonads, mechanism of hormone action (elementary Idea); role of hormones as messengers and regulators, hypo - and hyperactivity and related disorders; dwarfism, acromegaly, cretinism, goitre, exophthalmic goitre, diabetes, Addison's disease.

Note: Diseases related to all the human physiological systems to be taught in brief

EXAMINATION SYLLABUS

PERIODIC TEST 1

Chapters 1 to 4

HALF YEARLY EXAMINATION

Chapters 1 to 13

DECEMBER EXAMINATION

Chapters 1 to 20

FEBRUARY EXAMINATION

Full syllabus

NOTE: There will be a class test and assignment after every chapter.

DETAILED SYLLABUS OF COMPUTER SCIENCE

OBJECTIVES

- To understand basics of computers.
- To develop logic for Problem Solving.
- To develop problem solving skills and their implementation using C++.
- To understand and implement the concept of Object Oriented Methodology.
- To understand the concept of working with Relational Database.
- To understand the basic concept of Computing Logic.
- To understand the basic concepts of Communication and Networking technologies.
- To understand Open Source concepts.

COURSE STRUCTURE

Unit No.	Unit Name	Marks
1	Computer Fundamentals	10
2	Programming Methodology	12
3	Introduction to C++	14
4	Programming in C++	34
Total		70

ANNUAL SYLLABUS BREAK UP

APRIL

UNIT - 1: COMPUTER FUNDAMENTALS

Chapter 1- Computer Fundamentals

Classification of computers: Basics of computer and its operation; Functional Components and their interconnections, concept of Booting.

Chapter 2- Software Concepts

Types of Software - System Software, Utility Software and Application Software.

System Software: Operating System, Compiler, Interpreter and Assembler.

Operating System: Need for an Operating System, Functions of Operating System (Processor Management, Memory Management, File Management and Device Management), Types of Operating System interactive (GUI based), Time Sharing, Real Time and Distributed, Commonly used operating systems: UNIX, LINUX, Windows, Solaris, BOSS (Bharat Operating System Solutions); Mobile OS - Android, Symbian.

Utility Software: Anti-Virus, File Management tools, Compression tools and Disk Management tools (Disk Cleanup, Disk Defragmenter, Backup).

Open Source Concepts: Open Source Software, Freeware, Shareware, Proprietary Software.

Application Software: Office Tools - Word Processor, Presentation Tool, Spreadsheet Package, Database Management System; Domain Specific tools - School Management System, Inventory Management System, Payroll System, Financial Accounting, Hotel Management, Reservation System and Weather Forecasting System.

PPT on Software

Chapter 3- Data Representation in Computers

Number System: Binary, Octal, Decimal, Hexadecimal and conversion between two different number systems.

Internal Storage encoding of Characters: ASCII, ISCII (Indian scripts Standard Code for Information Interchange), and UNICODE (for multilingual computing).

PPT on Number System

MAY

Chapter 4- Microprocessor and Memory Concepts

Microprocessor: Basic concepts, Clock speed (MHz, GHz), 16 bit, 32 bit, 64 bit processors; 128 bit processors; Types - CISC Processors (Complex Instruction Set computing), RISC Processors (Reduced Instruction Set Computing), and EPIC (Explicitly Parallel Instruction computing).

Memory Concepts: Units: Byte, Kilo Byte, Mega Byte, Giga Byte, Tera Byte, Peta Byte, Exa Byte, Zetta Byte, Yotta Byte.

Primary Memory: Cache, RAM, ROM

Secondary Memory: Fixed and Removable storage - Hard Disk Drive, CD/DVD Drive, Pen Drive, Blue Ray Disk.

Input Output Ports/ Connections: Serial, Parallel and Universal Serial Bus, PS-2 port, Infrared port, Bluetooth, Firewire.

Video on Identifying Motherboard components

PPT on ports

UNIT 2- PROGRAMMING METHODOLOGY

General Concepts: Modular Approach, Clarity and Simplicity of Expressions, Use of proper names for Identifiers, Comments, Indentation; Documentation and Program Maintenance; Running and Debugging programs, Syntax Errors, Run-Time Errors, Logical Errors

JULY

Problem solving Methodologies: Understanding of the problem, solution for the problem, identifying minimum number of inputs required for output, writing code to optimizing execution time and memory storage, step by step solution for the problem, breaking down solution into simple steps (modular approach), identification of arithmetic and logical operations required for solution; Control Structure: conditional control and looping (finite and infinite).

Problem Solving: Introduction to Algorithms and Flowcharts

UNIT - 3: INTRODUCTION TO C++

Getting Started: C++ character set, C++ Tokens (Identifiers, Keywords, Constants, Operators,), Structure of a C++ Program (include files, main function), Header files – iostream.h, iomanip.h, cout, cin; use of I/O operators (<<and>>), Use of endl and setw (), Cascading of I/O operators, compilation, Error Messages; Use of editor, basic commands of editor, compilation, linking and execution

Data Types, Variables and Constants: Concept of Data types; Built-in Data types: char, int, float and double; Constants: Integer Constants, Character constants (- \n, \t, \b), Floating Point Constants, String Constants; Access modifier: const; Variables of built-in-data types, Declaration/Initialization of variables, Assignment statement, Type modifier: signed, unsigned, long

Operator and Expressions: Operators: Arithmetic operators (-, +, *, /, %), Assignment operator (=), C++ shorthands (+=, -=, *=, /=, %=) Unary operators (-), Increment (++) and Decrement (--) Operators, Relational operator (>, >=, <=, ==, !=), Logical operators (!, &&, ||), Conditional operator: <condition>?<if—true>:<if false>; Precedence of Operators; Automatic type conversion in expressions, Type casting;

AUGUST

UNIT 4: PROGRAMMING IN C++

Flow of control

Conditional statements: if else, Nested if, switch..case..default, use of conditional operator, Nested switch..case, break statement (to be used in switch..case only); Loops: while, do – while, for and Nested loops

SEPTEMBER

Half Yearly Examination

UNIT 4: PROGRAMMING IN C++

User-defined Data Types: Introduction to user defined data types.

Inbuilt Functions

Header file Categorization	Header File	Function
Standard input/output functions	stdio.h	gets (), puts ()
Character Functions	ctype.h	isalnum(), isalpha(), isdigit(), islower(), isupper(), tolower(), toupper()
String Functions	string.h	strcpy(), strcat(), strcmp (), strcmpi (), strlen(), strrev(),strupr(), strlwr()
Mathematical Functions	math.h	fabs (), pow (), sqrt (), sin (), cos (), abs ()

OCTOBER

Introduction to **user-defined function** and its requirements. Defining a function; function prototype, Invoking/calling a function, passing arguments to function, specifying argument data types, default argument, constant argument, call by value, call by reference, returning values from a function, calling functions with arrays, scope rules of variables: local and global variables. Relating to Parameters and return type concepts in built-in functions.

Structured Data Type

Arrays: Introduction to Array and its advantages.

One Dimensional Array: Declaration/initialization of One-dimensional array, Accepting array elements, accessing array elements, manipulation of array elements (sum of elements, product of elements, average of elements, linear search, finding maximum/minimum value) Declaration / Initialization of a String, string manipulations (counting vowels/ consonants/ digits/ special characters, case conversion, reversing a string, reversing each word of a string)

Two-dimensional Array: Declaration/initialization of a two-dimensional array, inputting array elements, accessing array elements, manipulation of Array elements (sum of row element, column elements, diagonal elements, finding maximum / minimum values)

NOVEMBER

Structure: Defining a Structure (Keyword Structure), declaring structure variables, accessing structure elements, passing structure to functions as value and reference, argument/parameter, function returning structure, array of structure, passing an array of structure as an argument/ a parameter to a function. Defining a symbol name using typedef keyword and defining a macro using #define preprocessor directive.

DECEMBER

PERIODIC TEST - 2

Project Work

JANUARY

Revision for Annual Examination

FEBRUARY

Annual Examination

Class XI Practical (C++)

Duration: 3 hours

Total Marks: 30

1. Programming in C++

10

One programming problem in C++ to be developed and tested on Computer during the examination. Marks are allotted on the basis of the following:

Logic	:	6 marks
Documentation	:	2 marks
Output Presentation	:	2 marks

2. One logical problem to be solved through flowcharts.

04

3. Project Work

06

Problems using String, Number, array and structure manipulation

General Guidelines: Initial Requirement, developing an interface for user (it is advised to use text based interface screen), developing logic for playing the game and developing logic for scoring points

- Memory game: A number guessing game with application of 2 dimensional arrays containing randomly generated numbers in pairs hidden inside boxes.
- Hollywood/Hangman: A word Guessing game
- Cows 'N Bulls: A word/number Guessing game
- Random Number Guessing Game (High\Low)
- A game to check whether a word does not use any of the forbidden letters
- Cross N knots game: A regular tic-tac –toe game.

or

Similar projects may be undertaken in other domains. (As mentioned in general guidelines for project, given at the end of the curriculum in a group of 2-4 students)

* Collaboration and Presentation of the project

34. Practical File

5+1*

- (a) Record of the configuration of computer system used by the student in the computer lab (by exploring inside computer system in the first 2 lab classes)
- (b) Must have minimum 20 programs from the topics covered in Class XI course.
 - Programs on Control structures
 - Programs on String manipulations
 - Programs on array manipulations (1D and 2D)
 - Programs in Structures

*1 mark is for innovation while developing programmes

5. Viva Voce

04

Viva will be asked from the syllabus covered in Class XI and the project developed by the student(s).

*1 mark is for innovating while developing programme.

EXAMINATION SYLLABUS

PERIODIC TEST 1

UNIT - 1: COMPUTER FUNDAMENTALS

Chapter 1: Computer Fundamentals

Chapter 2: Software Concepts

Chapter 3: Data Representation in Computers

HALF YEARLY EXAMINATION

UNIT - 1: COMPUTER FUNDAMENTALS

Chapter 1: Computer Fundamentals

Chapter 2: Software Concepts

Chapter 3: Data Representation in Computers

Chapter 4: Microprocessor and Memory Concepts

UNIT - 2: PROGRAMMING METHODOLOGY

Chapter 1: Algorithms and Flowcharts

Chapter 2: Programming Methodology

UNIT - 3: INTRODUCTION TO C++

Chapter 1: Getting Started

Chapter 2: Data Types, Variables and Constants

Chapter 3: Operators and Expressions

UNIT 4: PROGRAMMING IN C++

Chapter 1: Flow of control

PERIODIC TEST 2

UNIT - 1: COMPUTER FUNDAMENTALS

UNIT - 2: PROGRAMMING METHODOLOGY

UNIT - 3: INTRODUCTION TO C++

UNIT - 4: PROGRAMMING WITH C++

Chapter 1- Flow of Control

Chapter 2- Functions

Chapter 4- Arrays

ANNUAL EXAMINATION

Full syllabus

NOTE: There will be a class test and assignment after every chapter.

DETAILED SYLLABUS OF PHYSICAL EDUCATION

THEORY

MM 70

- Unit 1:** Changing Trends & Career in Physical Education
- Unit 2:** Olympic Movement
- Unit 3:** Physical Fitness, Wellness & Lifestyle
- Unit 4:** Physical Education & Sports for Differently Abled
- Unit 5:** Yoga
- Unit 6:** Physical Activity & Leadership Training
- Unit 7:** Test, Measurement & Evaluation
- Unit 8:** Fundamentals of Anatomy & Physiology
- Unit 9:** Kinesiology, Biomechanics & Sports
- Unit 10:** Psychology & Sports
- Unit 11:** Training In Sports
- UNIT12:** Doping

PRACTICAL

MM: 30

1. Physical Fitness (AAHPER) 10 Marks
2. Skill of any one Individual Game of choice from the given list** - 10 Marks
3. Viva - 05 Marks
4. Record File*** - 05 Marks

**Archery, Badminton, Bocce, Gymnastics, Judo, Swimming, Table Tennis, and Taekwondo & Tennis

***Record File shall include:

Practical-1: Labelled diagram of 400 M Track & Field with computations.

Practical-2: Computation of BMI from family or neighbourhood & graphical representation of the data.

Practical-3: Labelled diagram of field & equipment of any one game of your choice out of the above list.

Practical-4: Explanation & list of current National Awardees (Dronacharya Award, Arjuna Award & Rajiv Gandhi Khel Ratna Award))

Practical-5: Pictorial presentation of any five Asanas for improving concentration.

ANNUAL SYLLABUS BREAK UP

APRIL

CHAPTER 1: Changing Trends & Career in Physical Education

- Meaning & definition of Physical Education
- Aims & Objectives of Physical Education
- Changing trends in Physical Education
- Various Physical Education Courses available in India
- Career Options in Physical Education
- Soft skills required for different careers

MAY

CHAPTER 2: Olympic Movement

- Ancient & Modern Olympics (Summer & Winter)
- Olympic Symbols, Ideals, Objectives & Values
International Olympic Committee
- Indian Olympic Association
Dronacharya Awards, Arjuna Award & Rajiv Gandhi Khel Ratna Award
- Organisational set-up of CBSE Sports & Chacha Nehru Sports Award

JULY

CHAPTER 3: Physical Fitness, Wellness & Lifestyle

- Meaning & Importance of Physical Fitness, Wellness & Lifestyle
- Components of physical fitness
- Components of Health related fitness
- Components of wellness
- Preventing Health Threats Through Lifestyle Change
- Concept of Positive Lifestyle

CHAPTER 4: YOGA

- Meaning and Importance of Yoga
- Elements of Yoga
- Introduction - Asanas, Pranayam, Meditation & Yogic Kriyas
- Yoga for concentration & related Asanas (Sukhasana; Tadasana; Padmasana & Shashank asana)
- Relaxation Techniques for improving concentration – Yog-nidra

AUGUST

CHAPTER 5: Test, Measurement & Evaluation

- Define Test, Measurement & Evaluation
- Importance of Test, Measurement & Evaluation In Sports
- Calculation of BMI & Waist - Hip Ratio
- Soma to Types (Endomorph, Mesomorph & Ectomorph)
- Procedures of Anthropometric Measurement – Height, Weight, Arm & Leg Length

CHAPTER 6: Physical Activity & Leadership Training

- Introduction to physical activity & leadership
- Qualities & role of a Leader
- Behaviour change stages for physical activity (Pre-contemplation; Contemplation; Planning; Active; Maintenance)
- Meaning, objectives & types of Adventure Sports (Rock Climbing, Tracking, River Rafting, Mountaineering, Surfing and Para Gliding)
- Safety measures during physical activity and adventure sports

CHAPTER 7: Physiology: Fundamentals of Anatomy

- Define Anatomy, Physiology & Its Importance
- Function of Skeleton System, Classification of Bones & Types of Joints
- Properties of Muscles
- Function & Structure of Muscles
- Function & Structure of Respiratory System, Mechanism of Respiration
- Structure of Heart & Introduction to Circulatory System
- Oxygen debt, second-wind

OCTOBER

CHAPTER 8: Kinesiology, Biomechanics & Sports

- Meaning & Importance of Kinesiology & Biomechanics in Phy. Edu. & Sports
- Levers & Its Types and its application in sports
- Equilibrium – Dynamic & Static and Centre of Gravity and its application in sports
- Force – Centrifugal & Centripetal and its application in sports
- Introduction to Buoyancy Force

CHAPTER 9: Psychology & Sports

- Definition & Importance of Psychology in Phy. Edu. & Sports
- Define & Differentiate Between Growth & Development
- Developmental Characteristics at Different Stage of Development
- Adolescent Problems & Their Management

NOVEMBER

CHAPTER 10: Training in Sports

- Meaning & Concept of Sports Training
- Principles of Sports Training
- Warming up & limbering down
- Load, Symptoms of Over-load, Adaptation & Recovery
- Skill, Technique & Style
- Role of Free-play in the development of Motor Component

CHAPTER 11: Doping

- Concept & classification of doping
- Prohibited Substances & Methods
- Athletes Responsibilities
- Side Effects of Prohibited Substances
- Ergogenic aids & doping in sports
- Doping control procedure Practical

DECEMBER

CHAPTER 12: Physical Education & Sports for Differently Abled

- Aims & objectives of Adaptive Physical Education
- Organization promoting Adaptive Sports (Special Olympics Bharat; Paralympics; Deaflympics)
- Concept and need of Integrated Physical Education
- Concept of Inclusion, its need and Implementation
- Role of various professionals for children with special needs (Counsellor, Occupational Therapist, Physiotherapist, Physical Education Teacher, Speech Therapist & special Educator)

EXAMINATION SYLLABUS

PERIODIC TEST - 1

Chapter 1

HALF YEARLY EXAMINATION

Chapters 1, 2, 3, 5, 7

PERIODIC TEST - 2

Chapters 1 to 3, 5 to 10

ANNUAL EXAMINATION

Full Syllabus

NOTE: There will be a class test after every chapter.

अभिभावक कृपया ध्यान दें

1. स्कूल में अपना पता तथा टेलीफोन नंबर हमेशा सही-सही लिखवा कर रखें, जिससे की इमरजेंसी में आपसे बिना विलंब के संपर्क साधा जा सके\ अपने बच्चे को स्कूल शुरू होने के आधे घंटे पहले तथा स्कूल खत्म होने के आधे घंटे बाद से ज्यादा देर तक स्कूल में न छोड़े \
2. अपने बच्चे का टिफिन अनजान व्यक्ति के हाथ से न भेजें, वह नहीं लिया जाएगा \ अपने बच्चे को ले जाने के लिए अनजान व्यक्ति को न भेजें, उसके साथ बच्चा नहीं भेजा जाएगा \
3. कृपया बच्चे की फीस लोकल बैंक से अप्रैल, जुलाई, अक्टूबर तथा जनवरी की दस तारीख तक जमा करवा दें | उसके बाद 1 रू. प्रतिदिन फाइन लगेगा | अगर आपका बैंक किसी कारण से वापिस आता है तो 500 रुपये पेनल्टी तथा लेट फी फाइन लगेगा एवं फीस केवल ड्राफ्ट द्वारा ली जाएगी | दूसरी बार बैंक नहीं लिया जाएगा |
4. देर से आने वाले बच्चों को वापिस भेज दिया जाएगा |

अभिभावक के हस्ताक्षर

For Parents...

- 1 A complete 100% attendance is desirable. Leave of absence can be granted only in case of serious illness or eventuality or the marriage in blood relation or any emergency, on the production of a valid document. Parents are advised not to insist on obtaining leave for their children except when it is absolutely necessary.
- 2 Parents/Guardians/Students are expected to sincerely adhere to all the existing rules and regulations of the school which may be modified from time to time. In case of a dispute, the decision of the Principal shall be final and binding on them.
- 3 No student is allowed to come to school by bike or car if he/she does not possess a valid driving license.
- 4 The school strictly condemns the practice of extra coaching, tuition, professional coaching, etc.
- 5 Parents are to ensure that their ward takes timely nutritious meals i.e. breakfast, lunch and dinner containing milk products, seasonal vegetables, fruits, etc. and he/she refrains from fast food like burger, pizza, noodles, chips, etc.
- 6 All the students shall converse in English on the School Campus so, parents are to encourage their ward to speak in English. They must discourage him/her to use abusive language in or outside the school.
- 7 Parents are to attend PTMs regularly and check the Student Diary (Almanac) from time to time for a regulated follow up of their child so that he/she may acquire the habit of working with utmost regularity.
- 8 Parents are not to leave their child in the school half an hour before the start of the school and half an hour after the closure of the school.
- 9 They are not to send the tiffin of the child through any unknown person. He/ She will not be allowed to supply the same to the child.
- 10 Any unknown person will not be allowed to meet the child or fetch him/her from the school.
- 11 The school fee will be deposited on the quarterly basis by the local cheque only by 10th of April, July, October and January positively. After that late fee fine of Rs. 1/- per day will be charged and for the dishonored cheque a penalty of Rs. 500- with the late fine will be charged. In case the cheque is dishonored, the fee along with the penalty and late fine shall be accepted with a Demand Draft (DD) only.
- 12 Parents are to ensure that their child comes to school in time in proper school uniform. The late comers and uniform defaulters will be sent back home from the school entry itself.
- 13 Please keep the information about address and the telephone numbers updated in the school records. It helps the school contact you in case of emergency or any other requirement.

GENERAL INFORMATION

- The Curriculum Plan is a convenient division of work for an academic year.
- It makes learning and teaching fruitful and systematic.
- Every student is to undertake learning and writing work according to the prescribed syllabus.
- If the stipulated work is not completed by the end of the month, students should approach the subject-teacher concerned to hold extra classes.
- The guardian too should assess the progress of the child in the light of the syllabus covered.
- All tests and examinations are held as per the prescribed syllabus.

Parent's Signature