PART - A:

ELIGIBILITY OF CANDIDATES

- 1. A student seeking admission to any class in an institution will be eligible for admission to that class only if he/she:
 - a. has been studying in an institution recognised by or affiliated to this Board or the Directorate of School Education, Nagaland or any other recognised Board, Council in India or the Education department of the concerned state,
 - b. has qualified at the qualifying or equivalent examination making him/her eligible for admission to that class, and
 - c. produces document(s) (marksheet, transfer certificate) in support of his/her having qualified the qualifying or equivalent examination.
- 2. Migrating students to Classes IX & X shall not be eligible for admission unless they get the permission from this Board. Permission shall be granted only after the Board is satisfied that the course of study undergone and examination qualified is equivalent to the corresponding class and course of this Board.

Permission shall not be granted if the course of study undergone and examination qualified is not based on the core curriculum which is followed by this Board.

- 3. Admission to a class in an institution shall be allowed only to such a student who:
 - a. has completed a regular course of study in the immediate lower class,
 - b. has qualified the qualifying or equivalent examination from an institution registered with this Board or the Directorate of School Education, Nagaland or under any recognised Board, Council or the Education department of the concerned state,
 - c. has not qualified the examination corresponding to the class for which admission is sought or the next higher examination,
 - d. was studying in that class or a class equivalent to the class in which admission is sought and
 - e. has been permitted by this Board.
- 4. No student shall be admitted to any class or examination or promoted to any subsequent higher class in any institution without completing the course. He/she has to complete the regular course of study of the class to which he/she was admitted at the beginning of the academic session. He/she also has to qualify the examination at the end of the concerned academic session qualifying him/her for promotion to the next higher class.
- 5. Science stream at Higher Secondary level.

A student desiring to go for Science stream must get the qualifying grades in Mathematics and Science at Class X.

- 6. *Commerce stream at Higher Secondary level.*
 - A student desiring to go for Commerce stream must get the qualifying grade in Mathematics at Class X.
- 7. Arts stream at Higher Secondary level.

A student who does not get qualifying grade in one of the following subjects- Mathematics, Science, Social Sciences and Second Language but gets qualifying grade in the sixth subject can be admitted to Class XI under Arts stream.

8. Detention of eligible candidates:

Registered schools (recognised or permitted) may debar a student from appearing at the final examination on account of any of the following reasons:

- a. if there is no sign of academic improvement or if the student has a deteriorating performance in the weekly/monthly tests and terminal examination.
- b. gross misconduct and insubordination to the school authority,
- c. failure to attend coaching classes.
- d. non-payment of fees (school fees, examination fees etc).
- e. failure to abide by the school rules.
- f. any grave reason which necessitates such an action.
- 9. Candidates appearing for any of the Board's examination shall not be admitted to the examination if he/she has already qualified the equivalent or higher examination of any other Board, Council or University.
- 10. No student from an institution registered to the Board shall be eligible to take any of the Board's examination unless he/she has acquired the required percentage of attendance.
- 11. No institution registered with/affiliated to the Board shall endeavour to present the candidates who are not on its roll nor will it present the candidates of its unregistered branch/schools to any of the Board's examinations.
- 12. A student who has been studying in a school/college which is not recognised by this Board or by any other recognised Board, Council or University shall not be admitted to any class of an institution on the basis of certificate(s) of such unrecognised institution attended earlier nor shall be allowed to sit at any of the Board's examination.
- 13. If the statement made by the parent or guardian of a student or by the student himself/herself in any of the document(s) at the time of admission in school/concerned examination is found to be false or contain any willful misrepresentation of facts, the admission to school shall be cancelled or the candidature for the examination shall be rejected/cancelled at any time.
- 14. A candidate who has been expelled or is under punishment or rustication or is debarred for appearing in or taking an examination for any reason by this Board or any member Board of COBSE shall not be permitted to appear the High School Leaving Certificate Examination as private candidates.
- 15. To qualify at the Board's examination, a student must study and complete the prescribed regular course of study and also appear in all the required subjects of study at the examination.

PART - B

SCHEME OF STUDIES

Subjects of study: The scheme and subjects of study for Classes IX and X leading the enrolled students to the Class IX final examination and High School Leaving Certificate Examination (HSLC) respectively, shall include the following subjects of study.

A. Compulsory subjects:

- 1. First Language English
- 2. Second Language any one of the following:
 - i. Hindi ii. Bengali iii. Ao iv. Lotha
 - v. Sümi vi. Tenyidie vii. Alternative English
- 3. Mathematics
- 4. Science
- 5. Social Sciences

B. Sixth subject (any one):

- 1. Book Keeping & Accountancy
- 2. Environmental Education
- 3. Home Science
- 4. Foundation of Information Technology (FIT)
- 5. Music

C. Internally Assessed subjects:

- 1. Work & Art Education
- 2. Physical & Health Education (including Adolescence Education)

D. INSTRUCTIONAL TIME:

- (a) The number of working days shall be 210.
- (b) There shall be 6 (six) working hours having 8 (eight) periods a day and a minimum of 48 periods a week.

Teaching Time per week:

Recommended periods per week:

Sub	jects	Periods
1.	First Language (English)	7
2.	Second Language	6
3.	Mathematics	8
4.	Science	8
5.	Social Sciences	8
6.	Sixth subject	5
7.	Work & Art Education	3
8.	Physical & Health Education	3

Total periods 48

E. Medium of Instruction :

The medium of instruction and examination for all subjects shall be English except for Major/Modern Indian Language subjects, in which case the language concerned shall be applicable

F. Selection of the sixth subject:

It is desired that students choose their sixth optional subject keeping in view their future course of studies in general and professional courses. However, the school may also make an endeavour to cater to the needs of its pupils.

PART - C

SCHEME OF EXAMINATIONS

Nature of Examination:

A. Class IX final examination:

Class IX (nine) examination shall be conducted at the end of the academic year and results shall be declared internally by recognized schools/centre schools only in accordance with the criteria and syllabus prescribed by the Board in order to maintain a uniform standard in all registered schools. Certificate of qualification shall be issued by the Board.

B. HSLC Examination :

Class X (ten) examination known as High School Leaving Certificate shall be conducted at the end of class 10 schooling, basing on the Board prescribed syllabus of Class X (ten) only.

C. Details of externally assessed subjects, marks and duration for Class IX and HSLC Examination is given below:

Sl.no.	Subject	No.of papers	Marks	Duration
1.	Language I	One	80	3 hours
2.	Language II	One	80	3 hours
3.	Mathematics	One	80	3 hours
4.	Science	One	80	3 hours
5.	Social Sciences	One	80	3 hours
6.	Sixth subject (any one)			
	i) Environmental			
	Education	One	80	3 hours
	ii) Home Science	One	70	3 hours
	iii) Book Keeping &			
	Accountancy	One	70	3 hours
	iv) FIT	One	70	3 hours
	v) Music	One	70	3 hours
7.	W&A and P&H Education	on Two	100 each	CCE

D. Internal Assessment:

- (i) The marks allotted for internal assessment in the compulsory subjects and the sixth subject shall be assessed by the school throughout the year by Continuous Comprehensive Evaluation (CCE)
- (ii) For the internally assessed subjects such as Work & Art Education and Physical & Health Education, 100% of the syllabus shall be assessed through CCE by the schools. These subjects shall be evaluated on a 5 (five) point absolute scale of grading. The qualifying grade is D. The marks in letter grades of these subjects shall have to communicated by the schools to the Board.

E. Registration:

A student who is enrolled in the secondary classes under this Board shall register himself/herself with the Board.

Students who are not registered with the Board will not be allowed to sit at the Board's examination.

F. CHANGE OF SUBJECT:

- (i) A subject which is **NOT** studied in Class IX shall **NOT** be offered as a subject of study in Class X.
- (ii) After passing Class IX, students shall **NOT** be allowed to change the 6th subject in Class X.
- (iii) In special cases, change of subject from MILs to Alternative English shall be permissible with the prior approval of the Board. Change of Alternative English to MIL is not permitted.

CRITERIA FOR QUALIFYING TO THE NEXT HIGHER CLASS:

A. Externally assessed subjects:

- 1. **D** grade or a higher grade in First Language (English)
- 2. **D** grade or a higher grade in any 4 (four) from the following:
 - i. Second Language (Hindi/Bengali/Ao/Lotha/Sumi/Tenyidie Alternative English)
 - ii. Mathematics
 - iii. Science
 - iv. Social Sciences
 - v. *any one* Book Keeping & Accountancy, Environmental Education, Home Science, Foundation of Information Technology, Music.

B. Internally assessed subjects:-

- i. **D** grade or a higher grade in Work & Art Education
- ii. **D** grade or a higher grade in Physical & Health Education.

C. Attendance:-

The required minimum percentage of attendance to sit for the final examination is 80%.

A compulsory subject (excluding first language - English) in which a student has not acquired the qualifying grade can be interchanged with the sixth subject where he/she had acquired the qualifying grade for eligibility to the next higher class.

Students who do not opt for the sixth subject, in order to qualify to the next higher class, shall have to secure the minimum qualifying grades in all the 5 (five) subjects i.e. i. First Language (English), ii. Second Language, iii. Mathematics, iv. Science and v. Social Sciences.

PART - D

DESIGN OF QUESTION AND SYLLABUS

ENGLISH

Objectives:

- to communicate effectively and appropriately in real-life situations,
- to understand English effectively for study purpose across the curriculum,
- to develop and integrate the use of the four language skills listening, speaking, reading and writing,
- to speak and express idea in clear and grammatically correct English(Tenses) using appropriate punctuation and cohesion devices,
- to understand and interpret text i.e. prose, poems and stories by relating them to other material on the same theme (in their own experience and knowledge),
- to analyse, interpret and evaluate the idea in a text,
- to recycle and reinforce structure already learnt,
- to plan, organise and present ideas, expand notes into a piece of writing,
- to write a clear description e.g. of a place, an object or a system and to develop an interest and appreciation of literature.

DESIGN OF QUESTION PAPER ENGLISH

Weightage to different forms of questions:

Sl. no.	Forms of questions	Marks for each	No. of	Total marks
		question	questions	
1.	SA-I	3	7	21
2.	SA-II	4	4	16
3.	SA-III	5	4	20
4.	LA-I	7	1	7
5.	LA-II	8	2	16
	Total		18	80

Weightage level of questions:

Sl. no.	Level	Percentage	Marks
1.	Easy	25	20
2.	Average	60	48
3.	Difficult	15	12
	Total	100	80

The expected length of answer and time to be taken under different forms of questions shall be as follows:

Sl. no.	Forms of questions	Expected length of answer	Expected time for each question	Total expected time
1.	Reading	-	-	5 minutes
2.	SA-I	30-35 words	6 minutes	42 minutes
3.	SA-II	40-45 words	8 minutes	32 minutes
4.	SA-III	50-55 words	10 minutes	40 minutes
5.	LA-I	60-100 words	19 minutes	19 minutes
6.	LA-II	100-150 words	16 minutes	32 minutes
7.	Revision	-	-	10 minutes
			Total time	180 minutes

Scheme of options:

Internal choice shall be provided in:

- i. 2 (two) questions of 5 marks each
- ii. 1(one) question of 4 marks.

CLASS-IX ENGLISH

	se weightage 2 External Time : 3 hours	Marks: 80
Unit		Marks
I.	LITERATURE a) Prose	25
	 i. Rip Van Winkle (Washington Irving) ii. Dr. T.Ao - The football wizard (Dr. Senti Longkumer) iii. Toasted English (R.K Narayan) iv. A Simple philosophy(Seathl) v. A Christmas Carol (Charles Dickens) 	
	b) Poetry	
	i. Lord Ullins Daughter (Thomas Campbell)ii. Peace (Anonymous)iii. Mirror (Nini Lungalang)iv. Echoing Green (William Blake)	
	c) Drama	
	The Bishops Candlesticks (Victor Hugo)	
II.	READING	20
III.	WRITING	20
IV.	GRAMMAR	15
	Total	80
Part 'E	3' Internal	Marks
	Internal Assessment	
	1. Listening & Speaking	10
	2. Assignments and Formal Testing	5+5=10

PART - A: EXTERNAL

80 Marks/180 Periods

Unit I: Literature

25 marks/56 periods

20

100

- Questions will test comprehension at different levels, literal, influential and evaluative.
- There will be three short answer type questions on prose for 3 marks each.
- There will be one long answer type question on prose for 5 marks with internal option.
- There will be reference to context questions followed by questions to assess critical understanding of the poems for 5 marks. There can be two parts to each question.

Total

Grand total

Reference to context questions followed by questions to assess the overall understanding of the play for 6 marks. There can be two parts to each question.

Unit II: Reading

20 marks/45 periods

- This section will assess Reading Comprehension. The Section will be of 20 marks and will have 3 reading passages of 8 and 4 marks followed by questions that will test the sub skills of scanning, skimming, vocabulary reinforcement, inference evaluation, and comprehension.
- The passages will be extracts from poems/factual/literacy/discursive or descriptive passages.
- There will be two reading passages in about 200 300 words and the other shorter one of 120 150 words.

Unit III: Writing

20 marks/45 periods

- 1. Short composition of not more than 60 words in the form of a notice, e-mail, invitation (Informal with reply) or posters 4 marks.
- 2. There will be a short answer question of up to 80 100 words in the form of description of an event or completion of a paragraph based on inputs given -4 marks.
- 3. There will be a question of 5 marks based on a visual input with a minimum of 120 words.
- 4. Writing of an article, speech, informal letter, story writing based on visual or verbal stimulus or both, report writing for 7 marks with a minimum of 200 words.

Unit IV: Grammar

15 marks/34 periods

This section will assess grammar items in context for 15 marks. There can be four – five questions in this section which will test grammar items that have been dealt with in the English Class - IX textbook. Different structures such as verb forms, sentence structure, connectors, determiners, pronouns, prepositions, clauses, phrases will be tested. Grammar usage will be tested in context and not in isolated sentences.

PART - B: INTERNAL

20 Marks/20 Periods

1.	Conversation skills	10
2.	Assignments	5
3.	Formal testing	5

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbook:

A Multi-Skill Course in English Class IX

- Headword Publishing Company Pvt. Ltd. B-40, Sector 57, Noida, UP - 201301

Reference Book:

Senior School Grammar and Composition Hester Lott - Orient Blackswan Pvt.Ltd 1/24 , Asaf Ali road, New Delhi 110002

CLASS-X ENGLISH

Time: 3 hours

Unit-Wise	weightage
Part (A) F	vtornol

rart A	External	Time: 3 nours	Marks : ou
Unit			Marks
I.	LITERA a) Prose	TURE	25
	i.	Mehouviu and Morusa	
	ii.	Imitating the English Gentleman (MK Gandhi)	
	iii.	Invictus	
	iv.	Macbeth (William Shakespeare)	
	b) Poetry		
	i.	Death the Leveller(James Shirley)	
	ii.	Jina Etiben- A Romance re-told	
	iii.	The Listeners (Walter De La Mare)	
	iv.	The Windhover (GM Hopkins)	
	c) Drama	i.	
	Riders	to the Sea- J.N.Synge	
II.	READIN	G	20
III.	WRITIN	${f G}$	20
IV.	GRAMM	IAR	15
		Total	80
Part 'B	3' Internal		
	Internal A	Assessment	
	1. Lister	ning & Speaking	10
	2. Assig	nments and Formal Testing	5+5=10
		Total	20
		Grand total	100

PART - A: EXTERNAL

80 Marks/180 Periods

Unit I: Literature

25 marks/56 periods

Marks: 80

- Questions will test comprehension at different levels, literal, influential and evaluative.
- There will be three short answer type questions on prose for 3 marks each.
- There will be one long answer type question on prose for 5 marks with internal option.
- There will be reference to context questions followed by questions to assess critical understanding of the poems for 5 marks. There can be two parts to each question.
- Reference to context questions followed by questions to assess the overall understanding of the play for 6 marks. There can be two parts to each question.

Unit II: Reading

20 marks/45 periods

- This section will assess Reading Comprehension. The Section will be of 20 marks and will have 3 reading passages of 8 and 4 marks followed by questions that will test the sub skills of scanning, skimming, vocabulary reinforcement, inference evaluation, and comprehension.
- The passages will be extracts from poems/factual/literacy/discursive or descriptive passages.
- There will be two reading passages in about 200 300 words and the other shorter one of 120 150 words.

Unit III: Writing

20 marks/45 periods

- 5. Short composition of not more than 60 words in the form of a notice, e-mail, invitation (formal with reply) or advertisement 4 marks.
- 6. There will be a short answer question of up to 80 100 words in the form of description of an event or completion of a paragraph based on inputs given -4 marks.
- 7. There will be a question of 5 marks based on a visual input with a minimum of 120 words.
- 8. Writing of an article, speech, formal letter, report writing for 7 marks with a minimum of 200 words with internal options.

Unit IV: Grammar

15 marks/34 periods

This section will assess grammar items in context for 15 marks. There can be four – five questions in this section which will test grammar items that have been dealt with in the English Class -10 textbook. Different structures such determiners, subject-pronoun agreement, non-finite verb forms, transitive and intransitive verbs, voice, speech, clauses will be tested. Grammar usage will be tested in context and not in isolated sentences.

PART - B: INTERNAL

20 Marks/20 Periods

INTERNAL ASSESSMENT

ASSESSMENT SCALE

The Speaking and Listening Skills shall be assessed on a 3 (three) Band Point Scale. The assessment shall be done or given basing on the fulfilment of the criteria indicated against the respective Band Point.

SPEAKING

Many tasks will be set. The teacher has a choice to test the learner for 10 marks. The teacher can choose any two tasks based on the learners' competency.

Band Points	Criteria
5	a) High level of fluency
	b) High level of appropriacy
	c) Almost negligible errors as far as accuracy is concerned
3	a) Lacks fluency
	b) Some appropriacy
	c) Some accuracy
1	a) Lacks fluency
	b) Lacks appropriacy
	c) Lacks accuracy

Explanation: Fluency refers to using language in connected speech.

Appropriacy refers to speaking relevantly based on the set task.

Accuracy refers to grammatical and phonological functions of the language

LISTENING

Two task types shall be set for 5 marks each to assess the listening skills.

Task 1: Listening for comprehension.

Task 2: Listening for specific information.

The following Band Point Scale is to be used to assess the Listening Skills.

Band Points	Criteria		
5	a) Meaningful chunks are well represented		
	b) No spelling mistakes		
	c) No relevant words missing		
3	3 a) Small bits of meaningful chunks fairly correct		
	Some spelling mistakes (for every spelling error, half mark is to		
	be deducted. Errors in Proper nouns to be ignored)		
	Some relevant words missing		
1	a) Small bits of meaningful chunks not present		
	b) Lots of spelling mistakes		
	c) Some words missing		

How to assess in accordance with the Band Point Scale:

- 1. If a learner fulfils the criteria in Band Point 5, he/she can be given 5 out of 5.
- 2. If a learner fulfils the criteria in Band Point 3 depending on the inaccuracies, he/she can be given 3 or 4 out of 5.
- 3. If a learner fulfils the criteria in Band Point 1 depending on the inaccuracies, he/she can be given 1 or 2 out of 5.

Task types and Methodology for Listening & Speaking

(Every student should be tested with two tasks on Listening and Speaking. The total marks secured out of 20 should be divided by 2 and added with the marks of formal testing and assignments). For eg. If a student secures 12 in listening and speaking, it should be divided by 2, i.e, $12 \div 2 = 6$ and 5 in formal testing/assignment, the total mark should read as 6+5=11.

LISTENING

Maximum Marks: 20 Total Marks: 10

Under Listening, there shall be 2(two) tasks of 5 marks each.

Task 1: Completion of table based on hearing the reading:

(5 marks)

Objective: Listening for specific information.

Time: 1 period. 35 - 40 minutes. Actual test shall be for only 10 minutes. Time taken to prepare the learner, task familiarization and explanation is equally important.

Supplementary materials required: Listening text, copies of the task. If the task is to be put up on the board, it should be done before the examination starts. If the learner has to copy down the task, separate time should be set aside for that. It is however suggested that schools should get photo copies of the task so that the learner can concentrate on putting their listening skills into use.

Methodology:

A table/MCQ/or questions based on a format is to be given to the learner to complete as he listens. The listening text needs to be read out clearly at varying speed. The text should be read 3 times in the final test.

Task 2: Dictation in context in the best possible manner:

(5 marks)

Objective: This is to experience listening as a process. It is not meant to test reproducing of every word accurately. This dictation aims at testing comprehension of meaningful chunks of words/ sense groups rather than isolated words and at testing the learners overall reproduction of the idea behind the dictated sentence rather than accurate reproduction of isolated words.

Time: 1 period. 35 - 40 minutes. Actual test shall be for only 10 minutes. Time taken to prepare the learner, task familiarization and explanation is equally important to make into account learners shift in attention, listener affected emotionally, relationship between speaker and listener.

Supplementary materials required: Passage to be read out. Sheets for learner to complete the task.

Methodology:

Dictate the text at varying speed 3 times.

Keep the atmosphere relaxed yet strictly within the bounds of a testing procedure.

The teacher should adopt a non threatening attitude so as to make the test an enjoyable process for the learner.

Assessment: Refer the Assessment scale.

SPEAKING

Total Marks: 10

In Speaking, the teacher can set many tasks but primarily these tasks shall be to test only two objectives i.e., **Objective I** which is individual work and **Objective II** which is group work activity.

OBJECTIVE I: To make learners talk for a minute on real life situations, like giving them part of an everyday situation and complete it or give part of a story and ask learners to complete it. Tasks should aim at enhancing the Communicative functions like:

- Greeting people
- Introducing oneself
- Making request
- Asking and giving permission
- Offering help
- Giving Instructions and directions
- Telephonic skills

Time: 2 periods or 1 and a half hour.

Materials required: Situations for the talk.

Methodology:

There will be five situations to choose in the final question paper. The learner needs to be allowed to make his/ her choice of any one situation. The learner should be given a time period of 5 minutes to mentally prepare his/her talk. This is individual work and it will take the teacher time to complete the test. The class should be divided into groups. As such, other examiners will be needed to administer the test. The test should be simultaneously conducted by all examiners. The given assessment scale clearly outlines the mode of testing.

OBJECTIVE II:

The testing of this Role play task is based on small group work activity. A maximum of 5 students will form a small group. Based on the number of students in each class, schools need to decide on the time frame required to administer the test. Based on roll numbers, or any other clear criteria, groups may be tested. This is being left to schools to decide individually based on their convenience. Five children may be called inside a room where they are tested on I followed by II testing. The next group may be given preparation time in the meanwhile. These are suggestions and every school is encouraged to innovate upon this.

Time: 20 minute per group.

Materials required: *Cue Cards*. Cue cards will be provided along with the question paper. Schools should Photostat the cue cards sheet separately, so that students can refer to them easily. They can be put upon on the black board also.

Methodology:

Take a minute to make sure learners have understood their roles. A nervous student needs to be made comfortable and an overconfident student needs to be put in place firmly but politely.

Assessment: Refer the Assessment scale.

General Instructions:

Every school is encouraged to try out their own way of administering the test but a fair, and objective testing of listening and speaking is mandatory. For the final Board examination, the Board will intimate the date of examination. It is very important that schools should conduct this at least once, so that students are on completely familiar grounds when final testing is done. Continuous practice in the classroom using the tasks given in Orchids, a multi skill English course will reinforce the two important skills of listening and speaking which have been found to be largely neglected in most schools. It is important to begin reinforcing these skills and testing them from Class 9. These tests need to be conducted exactly in the spirit in which they have been outlined.

Prescribed textbook:

A Multi-Skill Course in English Class X

- Headword Publishing Company Pvt. Ltd. B-40, Sector 57, Noida, UP - 201301

Reference Book:

Senior School Grammar and Composition Hester Lott - Orient Blackswan Pvt.Ltd 1/24, Asaf Ali road, New Delhi 110002

ALTERNATIVE ENGLISH

Objectives:

- To equip learners and develop proficiency in the four language skills i.e. reading, writing, listening and speaking.
- To develop and express ideas in their own words with correct usage of grammar/English.
- To enrich the vocabulary and enable the students to access knowledge and information through reference skills (consulting a dictionary/thesaurus, library, internet etc.)
- To develop an interest and appreciation of literature for future career.
- To develop curiosity, creativity and to facilitate self-learning to enable them to become independent learners through extensive.
- To provide alternative for those MIL which are not fully developed and as an introduction to the study of English literature.

DESIGN OF QUESTION PAPER ALTERNATIVE ENGLISH

Weightage to different forms of questions:

Unit	Details of Topics/Sections	Types of	No. of	Marks	Total
		questions	questions		Marks
Unit I –	- One unseen passage of 300	VSA	10	10x1=10	10
Reading	words				
	- One literary piece/poem				
Unit II –	- Two writing items in about	LA II	2	2x6=12	12
Writing and	100-150 words, i.e. a				
Applied	newspaper report, article,				
Grammar	story writing, dialogue.				
	- Grammar section will assess	SA II	4	4x2=8	8
	grammar items in context.				
Unit III –	Prose/Poetry	MCQ	8	8x1=8	35
Literature		SA I	3	3x2=6	
		SA II	4	4x4=16	
		LA I	1	1x5=5	
	Drama/Fiction	MCQ	2	2x1=2	15
		SA I	2	2x2=4	
		SA II	1	1x4=4	
		LA I	1	1x5=5	

Sl. no.	Forms of questions	Marks for each	No. of questions	Total marks
		question		
1.	MCQ	1	10	10
2.	VSA	1	10	10
3.	SA-I	2	9	18
4.	SA-II	4	5	20
5.	LA-I	5	2	10
6.	LA-II	6	2	12
	Total		38	80

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1.	Easy	25	20
2.	Average	60	48
3.	Difficult	15	12
	Total	100	80

The expected length of answer and time to be taken under different forms of questions shall be as follows:

Sl.no.	Forms of questions	Expected length of	Expected time for	Total expected
		answer	each question	time
1.	Reading	-	-	10 minutes
2.	MCQ	-	2 minutes	20 minutes
3.	VSA	5-10 words	2 minutes	30 minutes
4.	SA-I	20-25 words	3 minutes	21 minutes
5.	SA-II	40-50 words	8 minutes	32 minutes
6.	LA-I	50-60 words	12 minutes	36 minutes
7.	LA-II	100-150 words	20 minutes	20 minutes
8.	Revision	-	-	11 minutes
			Total time	180 minutes

Scheme of options:

Internal choice shall be provided in:

- i. 1(one) question of 5 marks.
- ii. 1(one) question of 10 marks.

<u>CLASS – IX</u> ALTERNATIVE ENGLISH

Unit-Wise weightage

Part 'A' External Time: 3 ho	ours Marks: 80
Unit	Marks
Unit I - Reading skills	10
Unit II - Writing Skills and Applied Gramm	nar 20
Unit III - Literature	
1. Prose	20
2. Poetry	15
3. Drama	15
Total	80
Part 'B' Internal	20
Grand total	100

PART – A: EXTERNAL Unit I: Reading

80 Marks/180 Periods 10 Marks/20 Periods

This section will assess Reading Comprehension. The section will be of 10 marks and will have 1 (one) reading passage i.e. factual or discursive in about 300 words and 1 (one) literary passage or poem followed by VSA type of questions that will test the sub skills of scanning, skimming, vocabulary re-enforcement and comprehension.

Unit II: Writing Skills and Applied Grammar

12+8=20 Marks/50 Periods

2 (two) writing items in about 100-150 words for 6 marks each e.g. a newspaper report, article, story writing, dialogue.

Grammar section will assess grammar items in context for 8 marks. There can be two to four questions which will test grammar items through the following type of ways:

- Gap filling with one/two words to test articles, auxiliaries, tenses.
- Editing on Omission covering reported speech, punctuation, tenses.
- Transformation of Sentences in context, Tenses and Reported Speech.

Unit III: LITERATURE:

50 Marks/110 Periods

PROSE

- 1. The Rule of the Road (A.G. Gardiner)
- 2. The Ogress and the Two Orphans (R. Luikham)
- 3. Speech by APJ Abdul Kalam
- 4. The Tunguska Event (Carl Sagar)
- 5. The Devoted Friend (Oscar Wilde)

POETRY

- 1. Sonnet- To Science (Edgar Allan Poe)
- 2. Character of a happy life (Sir H. Wotton)
- 3. Mother's Tears (Dr. Sedengulie Nagi)
- 4. The Soul's Prayer (Sarojini Naidu)

DRAMA

The Tale of Ivan the fool

GRAMMAR

- 1. Auxiliaries
- 2. Articles
- 3. Tenses
- 4. Reported Speech in extended texts
- 5. Punctuation

PART – B: INTERNAL 1. Conversation skills 2. Assignments 3. Formal testing 5

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbook:

Alternative English Class IX

- Orient Blackswan, Pvt. Ltd. 1/24, Asaf Ali road, New Delhi 110002

Reference Book:

Senior School Grammar and Composition Hester Lott - Orient Blackswan Pvt.Ltd 1/24, Asaf Ali road, New Delhi 110002

<u>CLASS – X</u> ALTERNATIVE ENGLISH

Unit-Wise weightage

Time: 3 hours	Marks : 80
	Marks
	10
d Applied Grammar	20
	35
	15
Total	80
	20
Grand total	100
	d Applied Grammar Total

PART – A: EXTERNAL Unit I: Reading

80 Marks/180 Periods 10 Marks/25 Periods

This section will assess Reading Comprehension. The section will be of 10 marks and will have 1 reading passage i.e. factual or discursive in about 300 words and 1 literary passage or poem followed by VSA type of questions that will test the sub skills of scanning, skimming, vocabulary re-enforcement and comprehension.

Unit II: Creative Writing Skills and Applied Grammar

12+8=20 Marks/55 Periods

2 writing items in about 100-150 words for 6 marks each e.g. a newspaper report, article, story writing, dialogue.

Grammar section will assess grammar items in context for 8 marks. There can be two to four questions which will test grammar items through the following type of ways:

- Gap filling with one/two words to test conjunctions and prepositions.
- Editing on Omission covering Comparison of adjectives, Voice and Conjunctions.
- Transformation of Sentences in context, Clauses.

Unit III: LITERATURE:

50 Marks/100 Periods

- PROSE
 - 1. The Fragance of the Gods (Rev. Dr. Toshi Langu)
 - 2. Man against Virus (Naveen Sullivan)
 - 3. Speech by Severn Suzuki
 - 4. In Celebration of Being Alive (Dr. Christian Barnard)
 - 5. The Ambitious Guest (Hawthorne)

POETRY

- 1. To Sleep (William Wordsworth)
- 2. Prayer of the Meek (Lhusi Haralu)
- 3. Closed Path (Rabindranath Tagore)
- 4. Old folks laugh (Maya Angelou)

NON-FICTION

The Dairy of a Young Girl - Anne Frank (Retold by Cherry Gilchrist Series Editors: Andy Hopkins and Jocelyn Potter)

GRAMMAR

- 1. Comparison of Adjectives
- 2. Conjunctions
- 3. Voice
- 4. Clauses
- 5. Prepositions

PART – B: INTERNAL	20 Marks
1. Conversation skills	10
2. Assignments	5
3. Formal testing	5

Prescribed textbook:

Alternative English Class X - Orient Blackswan, Pvt. Ltd.
1/24, Asaf Ali road, New Delhi 110002

Reference Book:

Senior School Grammar and Composition
Hester Lott
- Orient Blackswan Pvt.Ltd
1/24, Asaf Ali road, New Delhi 110002

MAJOR/MODERN INDIAN LANGUAGES (MILs)

DESIGN O F QUESTION PAPER

Weightage to different forms of questions:

Section	Details of Topics/Sections	Types of	No. of	Marks	Total
		questions	questions		Marks
Section A-	One unseen passage of 300 –	VSA	10	10x1=10	10
Reading	400 words. There will be				
	questions to test vocabulary				
	and grammar.				
Section B-	- Informal Letter Writing/	LA II	1	1x6=6	10
Writing	Story Writing	SA II	1	1x4=4	
	- Advertisement/Notice				
Section C-	Grammar	MCQ	5	5x1=5	20
Grammar		VSA	10	10x1=10	
	Translation	VSA	5	5x1=5	
Section D-	Prose	MCQ	3	3x1=3	20
Literature		SA I	4	4x2=8	
		SA II	1	1x4=4	
		LA I	1	1x5=5	
	Poetry	MCQ	2	2x1=2	20
		SA I	2	2x2=4	
		SA II	1	1x4=4	
		LA I	2	2x5=10	

Sl. no.	Forms of questions	Marks for each	No. of	Total marks
		question	questions	
1.	MCQ	1	10	10
2.	VSA	1	25	25
3.	SA - I	2	6	12
4.	SA - II	4	3	12
5.	LA - I	5	3	15
6.	LA- II	6	1	6
	Total		48	80

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1.	Easy	25	20
2.	Average	60	48
3.	Difficult	15	12
	Total	100	80

The expected length of answer and time to be taken under different forms of questions shall be as follows:

Sl.no.	Forms of qestions	Expected length	Expected time for	Total expected
		of answer	each question	time
1.	MCQ	-	2 minutes	20 minutes
2.	VSA	5-10 words	2 minutes	50 minutes
3.	SA - I	20-25 words	3 minutes	18 minutes
4.	SA - II	40-50 words	8 minutes	24 minutes
5.	LA - I	60-90 words	12 minutes	36 minutes
6.	LA - II	100-150 words	17minutes	17 minutes
7.	Reading of Question	-	-	15 minutes
	Paper & Revision			
			Total time	180 minutes

Scheme of options:

There will be no overall choice. However, internal choice shall be provided in;

- i. 2(two) questions of 5 marks each.
- ii. 1(one) question of 4 marks.

MODERN INDIAN LANGUAGE: AO

Objective:

- Asen tetsü taso oshiji shitak angateta, züngtettsü, zülutettsü aser jempitettsü.
- Taküm nung pei kin sobaliba aser awashi angazüka benshitsü.
- Asen Ao oshi Arrla shitak wazüka ayutsü asoshi.

<u>CLASS-IX</u> MODERN INDIAN LANGUAGE: AO

Unit-Wise weightage

Time: 3 hours	Marks : 80
	Marks
	10
	10
	20
	20
	20
Total	80
	20
Grand total	100
	Total

PART - A : EXTERNAL

80 Marks/180 Periods

SECTION A - READING

10 marks/20 periods

One unseen passage of 300 - 400 words. There will be questions to test vocabulary and grammar.

SECTION B – WRITING

10 marks/20 periods

- 1. Informal Letter Writing/Story Writing
- 2. Advertisement/Notice

SECTION C – GRAMMAR

20 marks/40 periods

Grammar and translation:

- 1. Züngdangba (Numbers)
- 2. Amilem (Person)
- 3. Zülumen (Spelling & correction of errors)
- 4. Orrlem (olem)
- 5. O Meyipzük (Translation)

SECTION D – LITERATURE

40 marks/100 periods

Prose:

- 1. Awashi Tetezü Aser Amshiren
- 2. Awashi Yimya Balala Amshiren
- 3. Shiruru Aser Meinchir Tesendaktep
- 4. Sobaliba Tzüpokdak
- 5. Kaket Riju Nung Awashi
- 6. Tekülemdak Awashi

Poetry:

- 1. Oagi Alima Ka lir
- 2. Tsüa! Aukoshi
- 3. Nüknürar Melembu
- 4. Impur
- 5. Ochinaro Tia
- 6. Arishir Nungshi Ken

PART – B : INTERNAL 1. Conversation skills 2. Assignments 3. Formal testing 20 Marks 10 5

Folk songs may be assessed under conversation skills. Painting, drawing or crafts indigenous to the tribe may be assessed under assignment.

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbooks:

1.	Akümlir Mongsong, 2005 –	Ao Senden Literature Board, Mokokchung
<i>2</i> .	Orrlem (Ao Naga Grammar) –	Ao Senden Literature Board, Mokokchung
	M.L. Wati Jamir	
<i>3</i> .	Aor Lokti Puti Rajem(Vol. 1) –	Ao Senden Literature Board, Mokokchung
	Prof. A. Lanunungsang	
4.	Ao Oshi Tensenyim I -	Ao Senden Literature Board, Mokokchung

<u>CLASS-X</u> MODERN INDIAN LANGUAGE: AO

Unit-Wise weightage

Part 'A' External	Time: 3 hours	Marks: 80
Unit		Marks
SECTION A - Reading		10
SECTION B - Writing		10
SECTION C - Grammar		20
SECTION D - Literature		
1. Prose		20
2. Poetry		20
Total		80
Part 'B' Internal		20
G	rand total	100

PART - A: EXTERNAL

80 Marks/180 Periods

SECTION A - READING

10 marks/20 periods

One unseen passage of 300 - 400 words. There will be questions to test vocabulary and grammar.

SECTION B – WRITING

10 marks/20 periods

- 1. Formal Letter Writing/Report writing
- 2. Invitation/Dialogue writing

SECTION C – GRAMMAR

20 marks/40 Periods

Grammar and Translation:

- 1. Tongnir (Subject), Salur (Predicate), Nendong (Object)
- 2. Kulem (Tense)
- 3. Jilok & Müken Tongta (Direct & Indirect Narration)
- 4. Leplashi (Voice)
- 5. Oyim Jinutepyim (Simple, compound & complex sentence)
- 6. Timsü & Rapasü
- 7. Mungra
- 8. O Meyipzük (Translation)

SECTION D-LITERATURE

40 marks/100 periods

Prose:

- 1. Aor Sobaliba Aser Awashiren
- 2. Kibong Nung Awashi
- 3. Kima Yimdong Awashi
- 4. Alu Wadang Nung Awashi
- 5. Arem, Lushi Aser Tzü Mopung
- 6. Lokti Puti Rajem Awashi

Poetry:

- 1. Chungliyimti Kü Soyim
- 2. Ao Konang
- 3. Lisem Manung Tenüng
- 4. Nokinketer Sangro
- 5. Ni Meteta Lir
- 6. Ayatai

PART – B: INTERNAL	20 Marks
 Conversation skills 	10
2. Assignments	5
3. Formal testing	5

Folk songs may be assessed under conversation skills. Painting, drawing or crafts indigenous to the tribe may be assessed under assignment.

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbooks:

- 1. Mejen O Otsü Aser Sangro Ao Senden Literature Board, Mokokchung
- 2. Orrlem (Ao Naga Grammar) Ao Senden Literature Board, Mokokchung M.L. Wati Jamir
- 3. Aor Lokti Puti Rajem (Vol. 1) Ao Senden Literature Board, Mokokchung Prof. A. Lanunungsang

MODERN INDIAN LANGUAGE: LOTHA

Objectives:

- Erantolan lo choka osi tssohung lithokvü tsükona.
- Erantolan lo choka lio ji yakchia ochyu ovüng mhonkatokvü tsükona.
- Ekhae jiang, yitsüngkhyarhyu kyonkata ntsi-i mhonkata yithokvü.
- Yi nsan lanka mezhü shiang esüa: engae ekhi, nsanchi, ekhao tona eramo to jianglo tsüka- rankata yithkvü tsükona.
- Onte etancho yilona mhom hatonchethokvü tsükona.
- Ekhao tona eramo tolo chakcheta nzokathokvü tsükona.

<u>CLASS-IX</u> MODERN INDIAN LANGUAGE: LOTHA

Unit-Wise weightage

Part 'A' External	Time: 3 hours	Marks : 80
Unit		Marks
SECTION A - Reading		10
SECTION B - Writing		10
SECTION C - Grammar		20
SECTION D - Literature		
1. Prose		20
2. Poetry		20
Total		80
Part 'B' Internal		20
	Grand total	100

PART - A: EXTERNAL

80 Marks/180 Periods

SECTION A - READING

10 marks/20 periods

One unseen passage of 300- 400 words. There will be questions to test vocabulary and grammar.

SECTION B - WRITING

10 marks/20 periods

- 1. Informal Letter Writing/ Story Writing
- 2. Advertisement/ Notice

SECTION C – GRAMMAR

20 marks/40 periods

Grammar and translation:

- 1. Etümtokyi (Adjective)
- 2. Zonkayi (Structural words)
- 3. Myingthong (Pronoun)
- 4. Yishen (Conjunction)
- 5. Müchak (Number)
- 6. Ovon (Voices)
- 7. Echakyi (Idioms)
- 8. Engao (Interrogative)
- 9. Yintüp (Negative)
- 10. Etsyukayi (Article)
- 11. Translation

SECTION D – LITERATURE

40 marks/100 periods

Prose:

- 1. Nrio Motsü
- 2. Hümjonlijon
- 3. Era Loroe
- 4. Lijao Otsolov Motsü
- 5. Kyong Tona Etsüi to Noktademo Ji Motsü

Poetry:

- 1. Süpen Thera
- 2. Onkhümoe Loroe Retacho
- 3. Osümthüngi Ori Tssotacho
- 4. Ronsi Etsa
- 5. Tiyi Enong

PART - B: INTERNAL

20 Marks

Conversation skills
 Assignments
 Formal testing

Folk songs may be assessed under conversation skills. Painting, drawing or crafts indigenous to the tribe may be assessed under assignment.

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbooks:

- 1. Kyongyiran Motsü Ekhürhyucho Part I & II Kyong Academy, Wokha by K.R. Murry
- 2. Kyong Chungiyi Ekhürhyucho Kyong Academy, Wokha by K.R. Murry
- 3. Kyong Yinsalan (Grammar) Kyong Academy, Wokha by K.R. Murry
- 4. Anglo Lotha Vocabulary Kyong Academy, Wokha
- 5. Outline Grammar of Lotha Naga Language Kyong Academy, Wokha by W.E. Witter
- 6. Kyong Yi Chümkalan (Spelling Pattern) Kyong Academy, Wokha by K.R.Murry

<u>CLASS-X</u> MODERN INDIAN LANGUAGE: LOTHA

Unit-Wise weightage

Part 'A' External	Time: 3 hours	Marks : 80
Unit		Marks
SECTION A - Reading		10
SECTION B - Writing		10
SECTION C - Grammar		20
SECTION D - Literature		
1. Prose		20
2. Poetry		20
Total		80
Part 'B' Internal		20
	Grand total	100

PART - A : EXTERNAL :

80 Marks/180 Periods

SECTION A - READING

10 marks/20 periods

One unseen passage of 300- 400 words. There will be questions to test vocabulary and grammar.

SECTION B – WRITING

10 marks/20 periods

- 1. Formal Letter writing/ Report Writing
- 2. Invitation/ Dialogue Writing

SECTION C – GRAMMAR

20 marks/40 periods

Grammar and Translation:

- 1. Eyieton (Mood)
- 2. Tssoyioyi (Verb)
- 3. Tepfüyi (Adverb)
- 4. Kyong Chokha (Lotha calender)
- 5. Yiyutsüng (Tenses)
- 6. Mhachungyi (Preposition)
- 7. Yitsünga Tai Tsütsao (One Word Substitute)
- 8. Yirenthang Tona Erhüyi To Jiang Yinsan (Direct & Indirect speech)
- 9. Yichak Eni Pisi Yiren Nsungrio (Give two meanings and make sentences)
- 10. Yitsüng Echumpo Tssosi Yichak Esütao Tuv (Give another word with the same meaning)
- 11. Translation

SECTION D – LITERATURE

40 marks/100 periods

Prose:

- 1. Kyongyiran Motsü Ekhürhyucho Echi II
- 2. Ranphan Motsü
- 3. Ete Ntsinranche
- 4. Onjeni Motsü
- 5. Elhi Etssoe Olan Mongo Jiang
- 6. Kyong Tokhü Tsüngkyim Opvü Jiang

Poetry:

- 1. Kyong Chungiyi Ekhürhyucho
- 2. Oshomo Merangtacho
- 3. Wokha Yantsüro
- 4. Otsoe Okhara Chücho
- 5. Phencho Vara Rocho
- 6. Pofü

PART – B: INTERNAL	20 Marks
 Conversation skills 	10
2. Assignments	5
3. Formal testing	5

Folk songs may be assessed under conversation skills. Painting, drawing or crafts indigenous to the tribe may be assessed under assignment.

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbooks:

- 1. Kyongyiran Motsü Ekhürhyucho Part I & II Kyong Academy, Wokha by K.R. Murry
- 2. Kyong Chungiyi Ekhürhyucho Kyong Academy, Wokha by K.R. Murry
- 3. Kyong Yinsalan (Grammar) Kyong Academy, Wokha by K.R. Murry
- 4. Anglo Lotha Vocabulary Kyong Academy, Wokha
- 5. Outline Grammar of Lotha Naga Language Kyong Academy, Wokha by W.E. Witter
- 6. Kyong Yi Chümkalan (Spelling Pattern) Kyong Academy, Wokha by K.R.Murry

MODERN INDIAN LANGUAGE: SÜMI

Objectives:

- Mütsümisheyi chilu eno philu kepu ghola lono qophenikeu.
- Akivishi philu eno yelu kepu ghola lono qophenikeu.
- Kiphimiqo pelo panongu kutoshino ililai philu keu vechewono akighithi alau phulupenikeu.
- Kiphimiqo pelono nilikhi nizatsa achipi eno mütsümisheyi pilu kepu shi qophe nikeu.
- Kiphimiqo pelo nizatsa kiu ghola lono yepe puanikeno vethalu eno hepho kupha lupenikeu.
- Nizatsa kiphi ghola inikiviu lono pilu eno peithalu penikeu.
- Nizatsa tsayiko kighithi akishe tsü eno gihulu penike.
- Vethakulu kïmsïkulu iquphe kulupu ghola lono qophenikeu.
- Kiphimiqo kükümsü kupulo, nizatsa phikutholu keu vechewono aghakiqi shilu penikeu.
- Nizatsa tsayiko eno mhesho mheghi nikutsashi kümsülu penikeu ghola lono qophenikeu.
- Nizatsa tsayiko eno mhesho mheghi nikutssashi kümsülu penikeu ghola lono qophenikeu.
- Akiyethi qo kimyemi tsa gholano kumono nizatsa gholauno qophenikeu.
- Sümi tsalo akiyethi 'ü' alla süno Sümi tsa ipighilu akeu meküa ithi penike.
- Putüta ko agha tsa ghola hila pimono aqo lono qokiphe kaku mlano qophe akeu kiqi lono pilu eno yeh moayesa keu.
- Kütami shiyeh tsah. Sümono Nizatsau likhino küputsa kile peni keu ghola lono qopheni keu.

<u>CLASS-IX</u> MODERN INDIAN LANGUAGE: SÜMI

Unit-Wise weightage

		Marks: 80
		Marks
SECTION A - Readin	ng	10
SECTION B - Writin	g	10
SECTION C - Gramm	nar	20
SECTION D - Literat	ture	
1. Prose		20
2. Poetry		20
	Total	80
' Internal		20
	Grand total	100
	SECTION B - Writin SECTION C - Gramm SECTION D - Literat 1. Prose	2. Poetry Total 'Internal

PART - A: EXTERNAL SECTION A – READING

80 Marks/180 Periods 10 marks/20 periods

One unseen passage of 300-400 words. There will be questions to test vocabulary and grammar.

SECTION B - WRITING

10 marks/20 periods

- 1. Informal Letter Writing/ Story Writing
- Advertisement/Notice 2.

SECTION C – GRAMMAR

20 marks/40 periods

Grammar and translation:

- Amqo Kini Phikide Nikeu 1.
- 2. Tsashibe Kikije
- Kikihi Tsashibe 3.
- 4. Atsajo Kikije
- 5. Timi
- 6. Ngomichi
- Pighi Vehu 7.

SECTION D – LITERATURE

40 marks/100 periods

Prose:

- Aesop Xü Ghili 1.
- 2. Tuluni Pineh
- 3. Baibel Lo Chighi Saje
- 4. Akithi
- 5 Khumtsah Amighiu
- Kughato Sukhai 6.

Poetry:

- 1. Inakha Eno Ghonili
- 2. Anipu Shikipili
- 3. Asho Kighille
- 4. Küsakusho Leshe
- Apu Kishe Anga Kishe

PART – B: INTERNAL

20 Marks

- 1. Conversation skills
- 2. Assignments

10

5

3. Formal testing Folk songs may be assessed under conversation skills. Painting, drawing or crafts indigenous

to the tribe may be assessed under assignment.

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbooks:

- **Kichitssathoh** Sumi Literature Board, Zunheboto 1.
- *2*. Küghakiche Eno Leshe Sumi Literature Board, Zunheboto I. Lozhevi Sema
- *3*. Apu Assü Leshe Sumi Literature Board, Zunheboto (Mother book of Sümi Poems)
- Sumi Tsayeh (Grammar) 4. Sumi Literature Board, Zunheboto I. Lozhevi Sema

<u>CLASS-X</u> MODERN INDIAN LANGUAGE: SÜMI

Unit-Wise weightage

Part 'A	' External	Time: 3 hours		Marks: 80
Unit			Periods	Marks
I.	SECTION A - Read	ing		10
II.	SECTION B - Writi	ng		10
III.	SECTION C - Gram	nmar		20
IV.	SECTION D - Litera	ature		
	1. Prose			20
	2. Poetry			20
		Total		80
Part 'l	3' Internal			20
		Grand total		100

PART – A: EXTERNAL

80 Marks/180 Periods

SECTION A- READING

10 marks/20 periods

One unseen passage of 300-400 words. There will be questions to test vocabulary and grammar.

SECTION B-WRITING

10 marks/20 periods

- 1. Formal Letter Writing/Report Writing
- 2. Invitation / Dialogue Writing

SECTION C- GRAMMAR

20 marks/40 periods

Grammar and Translation:

- 1. Sütsakutho
- 2. Tsashi Pe Aje Lo Sükeu
- 3. Süchou Eno Bidelau
- 4. Akiye Ghola Shikithe Tsü Keu
- 5. Akiyethi Kikili
- 6. Atsa Tüna
- 7. Tsathi Kiyiqi

SECTION D-LITERATURE

40 marks/100 periods

Prose:

- 1. William Carey
- 2. Angushuu Kughulho
- 3. Nagami Küka Kümulapu Lo Sümiw Immaküssü
- 4. Tüsütixe Eno Külaküpu
- 5. Thochipa No Thochiu Miviwuve Keu
- 6. Tumumi Ghili

Poetry:

- 1. Shikhu Inakha Nu
- 2. Juxeli Mlo Ghime
- 3. Ashihamile
- 4. Arkha Leshe
- 5. Ratshamu Ghu Tüngü

33

PART – B: INTERNAL	20 Marks
1. Conversation skills	10
2. Assignments	5
3. Formal testing	5

Folk songs may be assessed under conversation skills. Painting, drawing or crafts indigenous to the tribe may be assessed under assignment.

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbooks:

<i>1</i> .	Kichitssathoh	-	Sumi Literature Board
<i>2</i> .	Küghakiche Eno Leshe	_	Sumi Literature Board
	I. Lozhevi Sema		
<i>3</i> .	Apu Assü Leshe (Poems in Sümi)	_	Sumi Literature Board
<i>4</i> .	Sumi Tsayeh (Grammar)	_	Sumi Literature Board
	I. Lozhevi Sema		

MODERN INDIAN LANGUAGE: TENYIDIE

Objectives:

- Rünyü mu phrükecü nu puocapuola silieketuo chülieketuo la.
- Pu mu thulie kevi chülieketuo la.
- Kephrümia bu u nei di u thuo u die phrü khropie mhasilieketuo la.
- Dieu puocü touu, puotouu mu puoca touu nunu silieketuo chülieketuo la.
- Kephrümia dieca chü pekralie mu süu puotou nunu selieketuo chülieketuo la.
- Uko bu uko diemvü rhulieketuo la.
- Uko bu uko die zivi, noule mu noudo se parlieketuo la.
- Uko bu uko die, diemvü mu kelhouzho-u uko vie ükecü lelieketuo la mu
- U Tenyimia kephrünuomiako bu u pfhe mu ütsali puoma kereko si pesou salieketuo la.

<u>CLASS-IX</u> MODERN INDIAN LANGUAGE: TENYIDIE

Unit-Wise weightage

Part 'A' External	Time: 3 hours	Marks : 80
		Marks
SECTION A - Reading		10
SECTION B - Writing		10
SECTION C - Grammar		20
SECTION D – Literature		
1. Prose		20
2. Poetry		20
Total	80	
Part 'B' Internal		20
	Grand total	100

PART - A: EXTERNAL

80 Marks/180 Periods

SECTION A – READING

10 marks/20 periods

One unseen passage of 300-400 words. There will be questions to test vocabulary and grammar.

SECTION B - WRITING

10 marks/20 periods

- 1. Informal Letter Writing/ Story Writing
- 2. Advertisement/Notice

SECTION C – GRAMMAR

20 marks/40 periods

Grammar and translation:

- 1. Diesouko (A to K)
- 2. Kekrükecüko Thu Kemezhükecü
- 3. Translation
- 4. Diekhu mu Dierozu

5.

SECTION D – LITERATURE

40 marks/100 periods

Prose:

- 1. Ukepenuopfü Themia Pete Khrie Ketou zo
- 2. Dieze
- 3. Thenu Samipfü
- 4. Chütuo, Chü Beituo, Chülietuo
- 5. Roviu I, II, III
- 6. Zue U Chü Penyawaya

Poetry:

- 1. Nhicu Zha
- 2. N Dziizei Hie
- 3. Leliecie
- 4. Keliya Zolie
- 5. No Kevitho-u

PART – B: INTERNAL 1. Conversation skills 2. Assignments 3. Formal testing 20 Marks 10 5

Folk songs may be assessed under conversation skills. Painting, drawing or crafts indigenous to the tribe may be assessed under assignment.

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbooks:

- 1. Noudo Dze Ura Academy Publication, Kohima Dino & Viswedel
- 2. Idiomatic Expression Ura Academy Publication, Kohima Rüzhükhrie Sekhose
- 3. Diekhu mu Dierozu Ura Academy Publication, Kohima Shürhozelie
- 4. Diezho mu Kezo, Mhathu (Grammar & Composition Revised edition 2016) Mhienirielie Vakha
- Ura Academy Publication

<u>CLASS-X</u> MODERN INDIAN LANGUAGE: TENYIDIE

Unit-Wise weightage

Part 'A' External	Time: 3 hours	Marks : 80
		Marks
SECTION A - Reading		10
SECTION B - Writing		10
SECTION C - Grammar		20
SECTION D - Literature		
1. Prose		20
2. Poetry		20
	Total	80
Part 'B' Internal		20
	Grand total	100

PART - A : EXTERNAL

80 Marks/180 Periods

SECTION A - READING

10 marks/20 periods

One unseen passage of 300-400 words. There will be questions to test vocabulary and grammar.

SECTION B - WRITING

10 marks/20 periods

- 1. Formal Letter Writing/Report Writing
- 2. Invitation/Dialogue Writing

SECTION C – GRAMMAR

20 marks/30 periods

Grammar and Translation:

- 1. Diesouko (L to Z)
- 2. Kekrükecüko thu kemezhükecü
- 3. Thuyie (Translation)
- 4. Diekhu mu Dierozu

SECTION D – LITERATURE

40 marks/100 periods

Prose:

- 1. Tsathou mu Themia
- 2. Krase
- 3. Terhü Miavimia Puo
- 4. Redcross Pesiekeshü
- 5. Kezise
- 6. Martin Luther King

Poetry:

- 1. Rütsolhouü
- 2. Nie Pie Penuo
- 3. A Kesuoü
- 4. Ketho mu Kevi
- 5. Niaki

PART – B : INTERNAL 1. Conversation skills 2. Assignments 3. Formal testing 20 Marks 5 5

Folk songs may be assessed under conversation skills. Painting, drawing or crafts indigenous to the tribe may be assessed under assignment.

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbooks:

1.	Neteya	_	Ura Academy Publication
<i>2</i> .	Üca 53	_	Ura Academy Publication
<i>3</i> .	Idiomatic Expression	-	Ura Academy Publication
	Rüzhükhrie Sekhose		

- 4. Diekhu Mu Dierozu Ura Academy Publication Shürhozelie
- 5. Diezho mu Kezo, Mhathu (Grammar & Composition Revised edition 2016) Mhienirielie Vakha
- Ura Academy Publication

MAJOR INDIAN LANGUAGE: BENGALI

OBJECTIVES:

- To develop the abilities of listening and reading with comprehension.
- To develop the abilities of oral and written expression.
- To enable the students to read independently for knowledge and recreation.
- To develop the abilities of using language correctly, accurately and effectively.
- To enable the students to understand the structure of the language and to analyse it.
- To enrich the vocabulary of the students and to enable them to use it more effectively.
- To enable them to appreciate literature of the language.
- To develop their aesthetic sense, originality, imagination and creativity.
- To sublimate their feelings and emotions through the studies of the literature of the language.
- To develop in them the feeling of belongingness to the language-literature and culture.
- To pay homage or honour to their mother tongue.
- To encourage to integrate various forms of creative expression from a story or poem.
- The language offers some unique opportunities stories, poems, linking children to their cultural heritage and also to give them an opportunity to understand their own experiences and to develop sensitivity to others.
- Through grammar, students can develop their knowledge about the source of words; acquire correct ideas about grammatical errors which are counted as common mistakes.

<u>CLASS-IX</u> MAJOR INDIAN LANGUAGE: BENGALI

Unit-Wise weightage

Part 'A	' External	Time: 3 hours	Marks : 80
Unit			Marks
I.	SECTION A - Readin	ıg	10
II.	SECTION B - Writing		10
III.	SECTION C - Gramn	nar	20
IV.	SECTION D - Literat	ure	
	1. Prose		20
	2. Poetry		20
		Total	80
Part 'l	3' Internal		20
		Grand total	100

PART - A: EXTERNAL

80 Marks/180 Periods

SECTION A – READING

10 marks/20 periods

One unseen passage of 300-400 words. There will be questions to test vocabulary and grammar.

SECTION B - WRITING

10 marks/20 periods

- 1. Informal Letter Writing/Story Writing
- 2. Advertisement/Notice

SECTION C – GRAMMAR

20 marks/40 periods

Grammar and translation:

- 1. Barno O Dhwani
- 2. Swara O Byanjan Sandhi
- 3. Karok: Bibhokti (Case ending)
- 4. Idioms (from Akka Pawa to Navamir Pantha pg. 290-301, New Edition, 2002, Bani Bichitra)
- 5. Anubad (Translation)

SECTION D – LITERATURE

40 marks/100 periods

Prose:

- Pitri Sneha Dwijendra Lal Roy
 Chhuti Rabindranath Tagore
- 3. Jagrato Devata Banophul
- 4. Ramer Sumati Sharat Chandra Chattapaddhyay
- 5. Bharat Barsho S. Wejed Ali

Poetry:

- Sadhok Man Kumari Basu
 Khai Khai Sukumar Ray
 Dhoola Mandir Rabindranath Tagore
- 4. Kabor Jaseem Uddin
 5. Amra Satyendranath Dutta

PART – B: INTERNAL

20 Marks

Conversation skills
 Assignments
 Formal testing

Folk songs may be assessed under conversation skills. Painting, drawing or crafts indigenous to the tribe may be assessed under assignment.

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed Textbooks:

- 1. Sahitya Sourabh
- The Assam State Text Book Production and Publication Corporation Limited, Guwahati - 781003
- 2. Bani Bichitra Pijush Dey
- Bani Prakashani, College Hostel Road, Guwahati - 781003

<u>CLASS-X</u> MAJOR INDIAN LANGUAGE: BENGALI

Unit-Wise weightage

Marks: 80
Marks
10
10
20
20
20
80
20
100

PART - A : EXTERNAL

80 Marks/180 Periods

SECTION A - READING

10 marks/20 periods

One unseen passage of 300-400 words. There will be questions to test vocabulary and grammar.

SECTION B - WRITING

10 marks/20 periods

- 1. Formal Letter Writing/Report Writing
- 2. Invitation/Dialogue Writing

SECTION C – GRAMMAR

20 marks/40 periods

Grammar and Translation:

- 1. Bachya (voice) only definition & identification
- 2. Samas
- 3. Substitutions of single words or Aek Kothay Prokash
- 4. Idioms (from Pagar Par to Hite Biporeet pg. 301 –307, New Edition, 2002, Bani Bichitra)
- 5. Anubad (Translation)

SECTION D – LITERATURE

40 marks/100 periods

Prose:

1.	Kolikatar Baroiary Pooja	_	Kali Prasanna Singha
2.	Jameedar	_	Bankim Chandra Chattapaddhyay

3. Bolai – Rabindranath Tagore
4. Baan – Mahashweta Devi

5. Abhageer Swargo – Sharat Chandra Chattapaddhyay

Poetry:

1. Kalketur Bhojan – Kavikankan Mukundaram

2. Uttar – Gostho – Baloram Das

Jagadish Chandra
 Adbhut Andhar Aek
 Babarer Prarthana
 Rabindranath Tagore
 Jeevanananda Dash
 Shankha Ghosh

PART – B: INTERNAL	20 Marks
1. Conversation skills	10
2. Assignments	5
3. Formal testing	5

Folk songs may be assessed under conversation skills. Painting, drawing or crafts indigenous to the tribe may be assessed under assignment.

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed Textbooks:

1. Natun Sahitya Chayan	- The Assam State Text Book Production and
	Publication Corporation Limited, Guwahati

2. Bani Bichitra – Bani Prakashani, College Hostel Road, Pijush Dey – Guwahati - 781003

MAJOR INDIAN LANGUAGE: HINDI

Objectives:

- Matri Bhasha ko sunane our padhane ke sath-sath bothan ke kshamta our yogyata ka vikas karana.
- Moukhik our lekhan abityati ko vikasit karna
- Sambado se gyan our manoranjan ke kshetra me atmnirbhar karna.
- Bhasha ke sudh our prabhavsali prayog karne ke kshamta ko vikshit karna.
- Apni Matri Bhasha tatha uski sanrachana ke sahi rup se samjh kar uska vishlesan kar sake.
- Shabd gyan ka vridhi karna jisase unka sahi rup se prayog kar sake.
- Matri Bhasha ke prati pathan-pathan ke liye protsahit karna.
- Kalatmak moulik, kalpnik our rachanatmak prabriti ko vikashit karna.
- Matri Bhasha tathu uske sahitya ke adhyan ke dwara bhawnao our sadbhaw ka parimarjan our vikash karna.
- Matri Bhasha uski sahitya samagri our sanskriti ke prati ruchi jagrit karna.

<u>CLASS-IX</u> MAJOR INDIAN LANGUAGE: HINDI

Unit-Wise weightage

Part 'A	'External	Time: 3 hours	Marks : 80
Unit			Marks
I.	SECTION A - Readin	g	10
II.	SECTION B - Writing		10
III.	SECTION C - Gramm	nar	20
IV.	SECTION D - Literatu	ire	
	1. Prose		20
	2. Poetry		20
		Total	80
Part 'l	B' Internal		20
		Grand total	100

PART - A: EXTERNAL

80 Marks/180 Periods

SECTION A - READING

10 marks/20 periods

One unseen passage of 300-400 words. There will be questions to test vocabulary and grammar.

SECTION B - WRITING

10 marks/20 periods

- 1. Informal Letter Writing/Story Writing
- 2. Advertisement/Notice

SECTION C – GRAMMAR

20 marks/40 periods

Grammar and Translation:

- 1. Sangya Aur Bhed
- 2. Sarvanaam Aur Bhed
- 3. Visheshan Aur Bhed
- 4. Kriya Aur Bhed
- 5. Kriyavisheshan Aur Bhed
- 6. Upsarg Aur Pratyay
- 7. Anek Shabdon Ke Liye Ek Shabd
- 8. Muhavare Asur Lokoktiyan
- 9. Translation

SECTION D – LITERATURE

40 marks/100 periods

Prose:

- 1. Ped Ki Baat
- 2. Pulie Badze
- 3. Vyakti Ka Punar Nirman
- 4. Bhikharin
- 5. Mera Bachpan
- 6. Bhagyashali Din

Poetry:

- 1. Kabir Ke Dohe
- 2. Tulsi Ke Dohe
- 3. Bharat Varsh
- 4. Vasant Sambhashan
- 5. Bhagwaan Ke Dakiye
- 6. Tab Yaad Tumhari Ati Hai

PART – B: INTERNAL

20 Marks

- 1. Conversation skills
- 2. Assignments
- 3. Formal testing

5 5

10

Folk songs may be assessed under conversation skills. Painting, drawing or crafts indigenous to the tribe may be assessed under assignment.

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed Textbook:

Bhasha Sarita Part I for Class IX S.K.Pathak, Zakienei Khoubve & G.K. Sinha - Nagaland Bhasha Parishad, Kohima

<u>CLASS-X</u> MAJOR INDIAN LANGUAGE: HINDI

Unit-Wise weightage

Part 'A	' External	Time: 3 hours		Marks: 80
Unit			Periods	Marks
I.	SECTION A - Reading			10
II.	SECTION B - Writing			10
III.	SECTION C - Grammar			20
IV.	SECTION D – Literature			
	1. Prose			20
	2. Poetry			20
		Total		80
Part 'l	3' Internal			20
		Grand total		100

PART - A : EXTERNAL

80 Marks/180 Periods

SECTION A - READING

10 marks/20 periods

One unseen passage of 300-400 words. There will be questions to test vocabulary and grammar.

SECTION B - WRITING

10 marks/20 periods

- 1. Formal Letter Writing/Report Writing
- 2. Invitation/Dialogue Writing

SECTION C – GRAMMAR

20 marks/40 periods

Grammar and Translation:

- 1. Sandhi Aur Uske Bhed
- 2. Samas Aur Vigrah
- 3. Karak Bhed Aur Prayog
- 4. Vachay Aur Uske Bhed
- 5. Punerukti Aur Uske Bhed
- 6. Paryaywachi/Vilom Shabd
- 7. Vachan Aur Ling
- 8. Muhavare Aur Lokoktiyan
- 9. Kaal Aur Uske Bhed
- 10. Translation

SECTION D – LITERATURE

40 marks/100 periods

Prose:

- 1. Mithaiwala
- 2. Akeli
- 3. Budhihya Ka Badla
- 4. Wapasi
- 5. Vyawahar Kushalta
- 6. Bhartiya Sanskriti Mein Guru Shishya Sambandh
- 7. Bhendey Aur Bhendiye

Poetry:

- 1. Niti Ke Dohe (Raheem)
- 2. Bihari Ke Dohe
- 3. Karmveer
- 4. Geet Mere
- 5. Akal Aur Uske Baad
- 6. Pujari Bhajan Pujan Aur Sadhan

PART – B: INTERNAL	20 Marks
1. Conversation skills	10
2. Assignments	5
3. Formal testing	5

Folk songs may be assessed under conversation skills. Painting, drawing or crafts indigenous to the tribe may be assessed under assignment.

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed Textbooks:

Bhasha Sarita Part II for Class X - Nagaland Bhasha Parishad, Kohima S.K.Pathak, Zakienei Khoubve & G.K. Sinha

MATHEMATICS

Objectives:

The broad objectives of teaching of Mathematics at secondary stage are to help the learners to:

- consolidate the Mathematical knowledge and skills acquired at the upper primary stage.
- acquire knowledge and understanding particularly by way of motivation and visualization, of basic concepts, terms, principles and symbols and underlying processes and skills.
- develop mastery of basic algebraic skills.
- develop drawing skills.
- feel the flow of reasons while proving a result or solving a problem.
- apply the knowledge and skills acquired to solve problems and wherever possible, by more than one method.
- to develop positive ability to think, analyze and articulate logically.
- to develop awareness of the need for national integration, protection of environment, observance of small family norms, removal of social barriers, elimination of sex biases;
- to develop necessary skills to work with modern technological devices such as calculators, computers, etc;
- to develop interest in Mathematics as a problem-solving tool in various fields for its beautiful structures and patterns, etc;
- to develop reverence and respect towards great Mathematicians for their contributions to the field of Mathematics;
- 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.

DESIGN OF QUESTION PAPER MATHEMATICS

Weightage to different forms of questions:

Section	Forms of questions	Marks for each	No. of questions	Total
		question		marks
A	MCQ	1	10	10
В	SA - I	2	5	10
C	SA - II	3	10	30
D	LA	5	6	30
	Total		31	80

Weightage level of questions:

Sl. no.	Level	Percentage	Marks
1.	Easy	20	16
2.	Average	60	48
3.	Difficult	20	16
	Total	100	80

The expected time to be taken under different section shall be as follows:

Sl. no.	Section	Expected time for each	Total expected
		question	time
1.	Reading the question paper	-	10 minutes
2.	A	2 minutes	20 minutes
3.	В	4 minutes	20 minutes
4.	С	6 minutes	60 minutes
5.	D	10 minutes	60 minutes
6.	Revision	-	10 minutes
		Total time	180 minutes

Scheme of options:

- 1. Internal choice shall be provided in:
 - i. any 5(five) questions of 3 marks in Section C
 - ii. all 6 (six) questions of 5 marks in Section D
- 2. The internal choice questions shall be set from the same unit with the same difficulty level.
- 3. The question setter has the liberty to modify textual questions but has to set questions within the purview of the syllabus.

CLASS-IX MATHEMATICS

Time: 3 hours

Unit-Wise weightage Part 'A' External

· ur · · ·		inc to nours	Wallis . Ou
Unit			Marks
I.	Number System		6
II.	Algebra		18
III.	Coordinate Geometry		6
IV.	Geometry		22
V.	Mensuration		14
VI.	Statistics & Probability		14
		Total	80
Part '	3' Internal - Practical		20
		Grand Total	100

PART – A: EXTERNAL Unit I: NUMBER SYSTEM 80 Marks/180 Periods 6 marks/12 periods

Marks: 80

1. Real Numbers

Review of representation of natural numbers, integers, rational numbers on the number line. Representation of terminating/non-terminating recurring decimals on the number line through successive magnification.

Rational numbers as recurring/terminating decimals.

Examples of non-recurring/non-terminating decimals such as $\sqrt{2}$, $\sqrt{3}$, $\sqrt{5}$, etc. Existence of non-rational numbers (irrational numbers) such as $\sqrt{2}$, $\sqrt{3}$ and their representation on the number line. Explaining that every real number is represented by a unique point on the number line and conversely, every point on the number line represents a unique real number.

Existence of \sqrt{x} for a given positive real number x (visual proof to be emphasized). Definition of n^{th} root of a real number.

Rationalization (with precise meaning) of real numbers of the type (and their combinations)

 $\frac{1}{a+b\sqrt{x}}$ and $\frac{1}{\sqrt{x}+\sqrt{y}}$, where x & y are natural numbers and a & b are integers.

Unit II: ALGEBRA

18 marks 22 periods

1. Polynomials

Definition of a polynomial in one variable, its coefficient with examples and counter examples, its terms, zero polynomial. Degree of a polynomial. Constant, linear, quadratic and cubic polynomials; monomials, binomials, trinomials. Factors and multiples. Zeros/roots of a polynomial/equation. State and motivate the Remainder Theorem with examples and analogy to integers. Statement and proof of the Factor Theorem. Factorization of $ax^2 + bx + c$, $a \ne 0$ where a, b and c are real numbers, and of cubic polynomials using the Factor Theorem.

Recall of algebraic expressions and identities. Further verification of identities of the type: $(x + y + z)^2 = x^2 + y^2 + z^2 + 2xy + 2yz + 2zx$

$$(x \pm y)^{3} = x^{3} \pm y^{3} \pm 3xy(x \pm y), x^{3} \pm y^{3} = (x \pm y)(x^{2} \pm xy \pm y^{2}),$$

$$x^{8} + y^{2} + z^{2} - 3xyz = (x + y + z)(x^{2} + y^{2} + z^{2} - xy - yz - zx)$$

and their use in factorization of polynomials. Simple expressions reducible to these polynomials.

2. Linear Equations in Two Variables

12 periods

Recall of linear equations in one variable. Introduction to the equation in two variables. Prove that a linear equation in two variables has infinitely many solutions and justify their being written as ordered pairs of real numbers, plotting them and showing that they seem to lie on a line. Examples, problems from real life, including problems on Ratio and Proportion and with algebraic and graphical solutions being done simultaneously.

Unit III: COORDINATE GEOMETRY

6 marks/10 periods

1. Coordinate Geometry

The Cartesian plane, coordinates of a point, names and terms associated with the coordinate plane, notations, plotting points in the plane, graph of linear equations as examples; focus on linear equations of the type Ax + By + C = 0, by writing it as y = mx + c

Unit IV: GEOMETRY

22 marks

1. Introduction to Euclid's Geometry

4 periods

History - Geometry in India and Euclid's geometry. Euclid's method of formalizing observed phenomenon into rigorous Mathematics with definitions, common/obvious notions, axioms/postulates and theorems. The five postulates of Euclid. Equivalent versions of the fifth postulate. Showing the relationship between axiom and theorem, for example:

(Axiom) 1. Given two distinct points, there exists one and only one line through them. (Theorem) 2. (Motivate) Two distinct lines cannot have more than one point in common.

2. Lines and Angles

16 periods

- 1. (Motivate) If a ray stands on a line, then the sum of the two adjacent angles so formed is 180° and the converse.
- 2. (Motivate) If two lines intersect, the vertically opposite angles are equal.
- 3. (Motivate) Results on corresponding angles, alternate angles, interior angles when a transversal intersects two parallel lines.
- 4. (Motivate) Lines, which are parallel to a given line, are parallel.
- 5. (Prove) The sum of the angles of a triangle is 180°
- 6. (Motivate) If a side of a triangle is produced, the exterior angle so formed is equal to the sum of the two interior opposite angles.

3. Triangles 22 periods

- 1. (Motivate) Two triangles are congruent if any two sides and the included angle of one triangle is equal to any two sides and the included angle of the other triangle (SAS Congruence).
- 2. (Prove) Two triangles are congruent if any two angles and the included side of one triangle is equal to any two angles and the included side of the other triangle (ASA Congruence).
- 3. (Motivate) Two triangles are congruent if the three sides of one triangle are equal to three sides of the other triangle (SSS Congruence).

- 4. (Motivate) Two right triangles are congruent if the hypotenuse and a side of one triangle are equal (respectively) to the hypotenuse and a side of the other triangle.
- 5. (Prove) The angles opposite to equal sides of a triangle are equal.
- 6. (Motivate) The sides opposite to equal angles of a triangle are equal.
- 7. (Motivate) Triangle inequalities and relation between 'angle and facing side' inequalities in triangles.

4. Quadrilaterals 12 periods

- 1. (Prove) The diagonal divides a parallelogram into two congruent triangles.
- 2. (Motivate) In a parallelogram, opposite sides are equal and conversely.
- 3. (Motivate) In a parallelogram, opposite angles are equal and conversely.
- 4. (Motivate) A quadrilateral is a parallelogram if a pair of its opposite sides is parallel and equal.
- 5. (Motivate) In a parallelogram, the diagonals bisect each other and conversely.
- 6. (Motivate) In a triangle, the line segment joining the mid-points of any two sides is parallel to the third side and (motivate) its converse.

5. Areas 6 periods

Review concept of area, recall area of a rectangle.

- 1. (Prove) Parallelograms on the same base and between the same parallels have the same area.
- 2. (Motivate) Triangles on the same base and between the same parallels are equal in area and its converse.

6. Circles 15 periods

Through examples, arrive at definitions of circle related concepts, radius, circumference, diameter, chord, arc, subtended angle.

- 1. (Motivate) Equal chords of a circle subtend equal angles at the center and (motivate) its converse.
- 2. (Motivate) The perpendicular from the center of a circle to a chord bisects the chord and conversely, the line drawn through the center of a circle to bisect a chord is perpendicular to the chord.
- 3. (Motivate) There is one and only one circle passing through three given non-collinear points.
- 4. (Motivate) Equal chords of a circle (or of congruent circles) are equidistant from the center(s) and conversely.
- 5. (Prove) The angle subtended by an arc at the center is double the angle subtended by it at any point on the remaining part of the circle.
- 6. (Motivate) Angles in the same segment of a circle are equal.
- 7. (Motivate) If a line segment joining two points subtends equal angle at two other points lying on the same side of the line containing the segment, the four points lie on a circle.
- 8. (Motivate) The sum of the either pair of the opposite angles of a cyclic quadrilateral is 180° and its converse.

7. Construction 10 periods

- 1. Construction of bisectors of line segments & angles 60°, 90°, 45° angles etc, equilateral triangles.
- 2. Construction of a triangle given its base, sum/difference of the other two sides and one base angle.
- 3. Construction of a triangle of given perimeter and base angles.

Unit V: MENSURATION

14 marks

1. Areas 5 periods

Area of a triangle using Hero's formula (without proof) and its application in finding the area of a quadrilateral.

2. Surface Areas and Volumes

10 periods

Surface areas and volumes of cubes, cuboids, spheres (including hemispheres) and right circular cylinders/cones.

Unit VI: STATISTICS & PROBABILITY

14 marks

1. Statistics 15 periods

Introduction to Statistics: Collection of data, presentation of data - tabular form, ungrouped/grouped, bar graphs, histograms (with varying base lengths), frequency polygons, qualitative analysis of data to choose the correct form of presentation for the collected data. Mean, median, mode of ungrouped data.

2. Probability 9 periods

History, Repeated experiments and observed frequency approach to probability. Focus is on empirical probability. (A large amount of time to be devoted to group and to individual activities to motivate the concept; the experiments to be drawn from real-life situations, and from examples used in the chapter on statistics).

PART – B: INTERNAL

Practical

Sl. No.	Areas of assessment	Marks
1.	Practical	10
2.	Project work	5
3.	Formal testing	5
	Total:	20

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbook:

Mathematics Class IX - Amenta Publications K.C. Kakoty - F-6, TDI Fun Mall, Moti Ngar,

New Delhi - 110015

CLASS-X MATHEMATICS

Time: 3 hours

Unit-Wise weightage Part 'A' External

Unit			Marks
I.	Number System		2
II.	Algebra		20
III.	Trigonometry		12
IV.	Coordinate Geometry		6
V.	Geometry		16
VI.	Mensuration		12
VII.	Statistics & Probability		12
		Total:	80
Part 'l	3' Internal - Practical		20
		Grand Total	100

PART - A: EXTERNAL

80 Marks/180 Periods

Marks: 80

Unit I: NUMBER SYSTEMS

2 marks/6periods

1. Real Numbers

Euclid's division lemma, Fundamental Theorem of Arithmetic - statements after reviewing work done earlier and after illustrating and motivating through examples. Proofs of results - irrationality of $\sqrt{2}$, $\sqrt{3}$, $\sqrt{5}$, decimal expansions of rational numbers in terms of terminating/non-terminating recurring decimals.

Unit II: ALGEBRA

20 marks

1. Polynomials

8 periods

Zeros of a polynomial. Relationship between zeros and coefficients of quadratic polynomials. Statement and simple problems on division algorithm for polynomials with real coefficients.

2. Pair of Linear Equations in Two Variables

15 periods

Pair of linear equations in two variables and their graphical solution. Geometric representation of different possibilities of solutions/inconsistency.

Algebraic conditions for number of solutions. Solution of a pair of linear equations in two variables algebraically - by substitution, by elimination and by cross multiplication method. Simple situational problems must be included. Simple problems on equations reducible to linear equations may be included.

3. Quadratic Equations

15 periods

Standard form of a quadratic equation $ax^2 + bx + c = 0$, $a \ne 0$. Solution of the quadratic equations (only real roots) by factorization, by completing the square and by using quadratic formula. Relationship between discriminant and nature of roots.

Problems related to day-to-day activities to be incorporated.

4. Arithmetic Progression

8 periods

Motivation for studying A.P. Derivation of standard results of finding the n^{th} term and sum of first n terms and their application in solving daily life problems.

Unit III: TRIGONOMETRY

12 marks

1. Introduction to Trigonometry

12 periods

Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence (well defined); motivate the ratios; whichever are defined at 0° & 90°. Values (with proofs) of the trigonometric ratios of 30°, 45° & 60°. Relationships between the ratios.

2. Trigonometric Identities

8 periods

Proof and applications of the identity $\sin^2 A + \cos^2 A = 1$. Only simple identities to be given. Trigonometric ratios of complementary angles.

3. Heights and Distances

8 periods

Simple and believable problems on heights and distances. Problems should not involve more than two right triangles. Angles of elevation/depression should be only 30°, 45°, 60°.

Unit IV: COORDINATE GEOMETRY

6 marks

1. Lines (in two-dimensions)

14 periods

Review the concepts of coordinate geometry done earlier including graphs of linear equations. Awareness of geometrical representation of quadratic polynomials. Distance between two points and section formula (internal). Area of a triangle.

Unit V: GEOMETRY

16 marks

1. Triangles

22 periods

Definitions, examples, counter examples of similar triangles.

- 1. (Prove) If a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio.
- 2. (Motivate) If a line divides two sides of a triangle in the same ratio, the line is parallel to the third side.
- 3. (Motivate) If in two triangles, the corresponding angles are equal, their corresponding sides are proportional and the triangles are similar.
- 4. (Motivate) If the corresponding sides of two triangles are proportional, their corresponding angles are equal and the two triangles are similar.
- 5. (Motivate) If one angle of a triangle is equal to one angle of another triangle and the sides including these angles are proportional, the two triangles are similar.
- 6. (Motivate) If a perpendicular is drawn from the vertex of the right angle of a right triangle to the hypotenuse, the triangles on each side of the perpendicular are similar to the whole triangle and to each other.
- 7. (Prove) The ratio of the areas of two similar triangles is equal to the ratio of the squares on their corresponding sides.
- 8. (Prove) In a right triangle, the square on the hypotenuse is equal to the sum of the squares on the other two sides.
- 9. (Prove) In a triangle, if the square on one side is equal to the sum of the squares on the other two sides, the angles opposite to the first side is a right triangle.

2. Circles 8 periods

Tangents to a circle motivated by chords drawn from points coming closer and closer to the point.

- 1. (Prove) The tangent at any point of a circle is perpendicular to the radius through the point of contact.
- 2. (Prove) The lengths of tangents drawn from an external point to a circle are equal.

3. Constructions 8 periods

- 1. Division of a line segment in a given ratio (internally).
- 2. Tangent to a circle from a point outside it.
- 3. Construction of a triangle similar to a given triangle.

Unit VI: MENSURATION

12 marks

1. Areas related to Circles

15 periods

Motivate the area of a circle; area of sectors and segments of a circle. Problems based on areas and perimeter/circumference of the above said plane figures. (In calculating area of segment of a circle, problems should be restricted to central angle of 60°, 90° & 120° only. Plane figures involving triangles, simple quadrilaterals and circle should be taken.)

2. Surface Areas and Volumes

15 periods

- i. Problems on finding surface areas and volumes of combinations of any two of the following: cubes, cuboids, spheres, hemispheres and right circular cylinders/cones. Frustrum of a cone.
- ii. Problems involving converting one type of metallic solid into another and other mixed problems. (Problems with combination of not more than two different solids be taken.)

Unit VII: STATISTICS & PROBABILITY

12 marks

1. Statistics

9 periods

Mean, median and mode of grouped data (bimodal situation to be avoided). Cumulative frequency graph. Drawing of pie-charts (fractional angles to be avoided).

2. Probability 9 periods

Classical definition of probability. Connection with probability as given in Class 9. Simple problems on single events, not using set notation.

PART - B: INTERNAL

Practical

Sl. No.	Areas of assessment	Marks
1.	Practical	10
2.	Project work	5
3.	Formal testing	5
	Total:	20

Prescribed textbook:

Mathematics Class X K.C. Kakoty Amenta Publications F-6, TDI Fun Mall, Moti Ngar, New Delhi - 110015

SCIENCE

Objectives:

- to understand the basic concepts, principles and laws of science
- to apply basic scientific principles in finding solutions to problems related to agriculture, energy, health, nutrition, etc
- to develop problem- solving and decision- making skills
- to inculcate values that underline the study of science
- to develop and understand various processes of the environment and concern for its conservation and preservation
- to understand and appreciate the joint enterprise of science, technology and society
- to acquire process skills which form part of the attitude for developing a scientific temper
- to develop certain manipulative skills which are required in day-to-day situations
- to develop scientific attitude which will equip them to continue science education throughout life

DESIGN OF QUESTION PAPER SCIENCE

Weightage to different forms of questions:

Sl. no.	Forms of questions	Marks for each question	No. of questions	Total marks
1.	MCQ	1	10	10
2.	VSA	1	5	5
3.	SA -I	2	5	10
4.	SA -II	3	10	30
5.	LA	5	5	25
	Total		35	80

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1.	Easy	25	20
2.	Average	60	48
3.	Difficult	15	12
	Total	100	80

The expected length of answer and time to be taken under different forms of questions shall be as follows:

Sl.no.	Forms of questions	Expected length of	Expected time for	Total
		answer	each question	expected time
1.	Reading	-	-	10 minutes
2.	MCQ	-	2 minutes	20 minutes
3.	VSA	one word/one sentence	2 minutes	10 minutes
4.	SA-I	20-30 words	4 minutes	20 minutes
5.	SA-II	40-60 words	5 minutes	50 minutes
6.	LA	70-100 words	12 minutes	60 minutes
7.	Revision	-	-	10 minutes
			Total time	180 minutes

Scheme of options:

There will be no overall choice. However, internal choice shall be provided in:

- i. 4 (four) questions of 3 marks each
- ii. 4 (four) questions of 5 marks each.

Numericals and diagrams:

- i. Weightage of about 5 (five) marks shall be given for numericals.
- ii. Weightage of about 8 (eight) marks shall be given for diagrams.

Typology of questions:

In order to assess different abilities related to the subject, the question paper shall include open-ended questions; drawing/illustrations based questions and questions testing higher order thinking skills of the learners.

CLASS-IX SCIENCE

Unit-Wise weightage

Part 'A	'External Tin	ne: 3 hours	Marks: 80
Unit			Marks
I.	Matter-Nature and Behaviour		24
II.	Motion, Force and Work		23
III.	Organisation in the Living Wo	orld	09
IV.	Nutrition and Health		09
V.	Natural Resources		15
		Total	80
Part 'l	3' Internal		20
•		Grand Total	100

PART – A: I	EXTER	RNAL		80 Marks/180 Periods
Unit I:	Matte	er – Nature and behaviour		
	1.1	Nature of Matter)	
	1.2	Structure of Atom	}	13 marks
	1.3	Periodic Classification of Elements	J	
	1.4	Chemical Bonding)	
	1.5	Chemical Reactions	}	11 marks
	1.6	Hydrocarbons	J	
Unit II:	Motio	on, Force and Work		
	2.1	Motion)	
	2.2	Force	}	13 marks
	2.3	Gravitation	J	
	2.4	Work and Energy	٦	
	2.5	Wave Motion and Sound	}	10 marks
Unit III:	Orga	nisation in the Living World		
	3.1	Cell and Tissues	٦	
	3.2	Diversity in the Living World	}	09 marks
Unit IV:	Nutri	tion and Health		
	4.1	Food, Nutrition and Health	7	
	4.2	Human Diseases	}	09 marks
Unit V:	Natu	ral Resources		
	5.1	Our Natural Resources	7	10 marks
	5.2	Improvement in Food Resources	Ì	
	5.3	Our Environment	_	05 marks

Unit I: MATTER-NATURE AND BEHAVIOUR

48 Periods

Nature of Matter: Classification of matter based on chemical construction-elements, compounds and mixtures, types of mixtures, homogeneous and heterogeneous solution, suspension and colloid, concentration of solution (percentage only).

Atoms and molecules, atomic theory of matter (Dalton's Postulates), atomic and molecular masses, the mole (basic concept only), law of constant proportion, calculation of percentage composition of elements in simple compounds, determination of empirical and molecular formulae of simple substances. (9 periods)

Structure of Atom: Constituents of an atom-electrons, nucleus (neutrons and protons), atomic number and mass number, isotopes, distribution of electrons in shells (up to atomic number 20), valence electrons and valency, radioactivity, radio-isotopes and their applications. **(8 periods)**

Periodic Classification of Elements : A brief historical perspective of periodic classification of elements, periodic law, modern periodic table of 18 columns, variation in properties across a period and along a group-metallic and non-metallic, atomic size, ionization energy and electron affinity. (7 periods)

Chemical Bonding: Formation of a chemical bond, types of bonds-ionic and covalent, electro negativity and a polar covalent bond, properties of ionic and covalent compounds.

(7 periods)

Chemical Reactions: Formulae of simple compounds, equation of simple chemical reactions and their balancing; types of chemical reactions-combination, decomposition, displacement (single and double displacement), oxidation and reduction (in terms of gain/loss of electrons).

(7 periods)

Hydrocarbons: Classification (saturated and unsaturated); homologous series; preparation and properties of methane, ethene and ethyne. (10 periods)

Unit II: MOTION, FORCE AND WORK

55 Periods

Motion: Motion-in living and non-living; uniform and non-uniform motion (one direction) – distance and displacement, velocity and acceleration; distance-time and velocity-time graphs for uniform and uniformly accelerated motion, derivation of equations of motion by graphical method, uniform circular motion (qualitative idea only). (14 periods)

Force: Force and motion- Newton's laws of motion; inertia of a body, inertia and mass, momentum, force and acceleration, conservation of momentum, action and reaction forces. Friction-factors affecting friction, sliding and rolling friction, examples of advantages and disadvantages of friction, control of friction (qualitative idea only). Thrust and Pressure-Archimedes' principle and its applications, relative density. (13 periods)

Gravitation: Universal law of gravitation-force of gravitation of the earth (gravity). Effect of gravity on plants (in brief), acceleration due to gravity, mass and weight, free fall; motion of a projectile with initial horizontal velocity (qualitative idea only). (7 periods)

Work and Energy: Work done by a force-power and energy, kinetic and potential energy; transformation of scale (Celsius, Kelvin); thermometers-laboratory and clinical; specific heat capacity; computation of heat lost or gained by method of mixtures. Thermal expansion-co-efficient of linear and volume expansion; change of state, latent heat; cooling due to evaporation; humidity and relative humidity. (12 periods)

Wave Motion and Sound: Motion of a simple pendulum, oscillation and waves; types of waves-longitudinal and transverse; graphical representation of simple harmonic waves; amplitude, wavelength, frequency and velocity of a wave; nature of sound and its propagation; range of hearing in humans; reflection of sound, echo, SONAR; structure of the human ear (auditory aspect only). (9 periods)

Unit III: ORGANIZATION IN THE LIVING WORLD 28 Periods

Cell and Tissues: Cell structure, difference between prokaryotic and eukaryotic cells, functions of cell organelles (brief account), cell division-mitosis (different stages) and meiosis (elementary idea). Plant tissues-structure and functions (meristematic and permanent tissues); animal tissues-structure and functions (epithelial, connective, muscular and nervous tissues). (17 periods)

Diversity in the Living World: General idea of classification of living organisms and their importance, nomenclature, classification (two kingdoms) with characteristics and examples, up to phylum in plants and invertebrate animals, and up to class in chordates. (11 periods)

Unit IV: NUTRITION AND HEALTH 24 Periods

Food, Nutrition and Health: Health and its importance (WHO definition), community and personal health; conditions essential for good health (nutrition, proper habits, exercise and relaxation), components of food (nutrients in food, their sources and functions), balanced diet, under-nutrition and malnutrition, food adulteration (definition, common food adulterants, their tests and harmful effects); quality of drinking water. (11 periods)

Human Diseases: Diseases-definition, source and types of diseases (acute and chronic; communicable and non-communicable), symptoms, prevention and control of some diseases (malaria, diarrhoea, jaundice, typhoid, rabies, AIDS, tuberculosis); deficiency diseases-Protein energy malnutrition (marasmus and kwashiorkor), vitamin deficiency (scurvy, rickets, beriberi, pellagra, xerophthalmia), mineral deficiency (anaemia, goitre); Polio (13 periods)

Unit V: NATURAL RESOURCES 25 Periods

Our Natural Resources: Air, water, soil, minerals, energy, flora and fauna, management and replenishment of natural resources. (6 periods)

Improvement in Food Resources: Mixed farming, mixed cropping, crop rotation, organic farming; varietal improvement through breeding and selection- poultry farming, piggery, fishery, apiculture, mushroom cultivation, paddy cultivation. (9 periods)

Our Environment: Habitat and Adaptation-Habitat and its types, adaptation in plants and animals, causes and effects of alteration of habitats on organisms, conservation of habitats. Biosphere-ecosystem and biosphere, structure of an ecological system, food chain, food web, trophic levels, function of an ecological system, flow of energy, biogeochemical cycles of materials (carbon and nitrogen), types of ecosystems, biomass, biodiversity and its importance. (10 periods)

Area of Assessment	Marks
1. Experiments/Activities	10
2. Records	5
3. Formal Test	5
Total	20

Experiments and activities should be conducted alongside the concepts taught in theory classes. The students should be assessed on a continuous and comprehensive basis. The role of a teacher assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

A student is expected to perform and record at least 3 experiments and 2 activities in each period of assessment from the list suggested below. Thus, a student shall perform a total of at least 6 (six) experiments and 4 (four) activities, at least one from each unit, throughout the academic year.

List of Experiments:

• Matter, Nature and Behaviour

- To prepare a solution of common salt/ sugar of a given percentage composition by mass
- To prepare a colloidal solution of sulphur and differentiate it from (i) true solution, and (ii) suspension on the basis of transparency and filtration criterion respectively.
- To differentiate between a mixture (containing two components) and pure compound.
- To perform and observe the following reactions and classify them into:
 - (i) Combustion reaction
 - (ii) Decomposition reaction
 - (iii) Displacement reaction
 - (iv) Double displacement reaction
 - 1. Action of water on quicklime
 - 2. Action of heat on ferrous sulphate crystals
 - 3. Iron nails kept in copper sulphate solution
 - 4. Reaction between sodium sulphate and barium chloride solutions
 - 5. Burning of magnesium ribbon in air
 - 6. Action of heat on ammonium chloride

• Motion, Force and Work

- To determine the density of a liquid (other than water) by using a spring balance and a measuring cylinder.
- To determine the density of a solid (denser than water) by using a spring balance and a measuring cylinder.
- To study the variation in time period of a simple pendulum with length and to plot L-T² graph.
- To determine the value of acceleration due to gravity.
- To study the variation in limiting friction with mass and the nature of surfaces in contact.
- To verify Archimedes' Principle.
- To determine the boiling point of water and melting point of a solid (ice, urea).
- To determine the specific heat of a metallic solid (of known mass) using the method of mixtures.
- To measure the temperature of hot water as it cools and plot a temperature-time graph.
- To determine the velocity of a pulse propagated through a stretched string/sling.

• Organisation in the Living World

- To prepare temporary mount of onion peel, human cheek cells and spirogyra, to identify their parts and draw labelled diagrams.
- To identify and draw labelled diagrams of different stages of mitosis from prepared slides.
- To identify different plant tissues (parenchyma, collenchyma, sclerenchyma) and animal tissues (striated muscle, nerve, blood) from prepared slides and draw their labelled diagrams.
- To collect and identify different plant and animal specimens.
- To study the characteristics of *Spirogyra/ Agaricus*, Moss/ Fern, *Pinus* (either with male or female) and an Angiosperm plant. Draw and give two identifying features of groups they belong to.
- To observe and draw the given specimens- earthworm, cockroach, bony fish and bird. For each specimen, record- (a) one specific feature of its phylum (b) one adaptive feature with reference to its habitat.

• Nutrition and Health

- To test the presence of glucose and starch in the given samples of food materials.
- To test the presence of adulterants in a given sample of food material, turmeric or coriander (in powdered form).
- To collect articles in the local newspaper regarding nutrition and health.
- To check the pH of the water supplied to your house using a pH paper, also check the pH of the water in the local water body (pond, river, lake, stream, etc.).

• Natural resources and Environment

- To make a herbarium of cereals, pulses and oil seeds and identify the seasons of their sowing and harvesting.
- To visit a local poultry farm/ fish farm/ apiary/ mushroom cultivation/ piggery/ paddy field. Observe the different types of breeds/ fish/paddy/ etc.
- To study adaptive features of xerophytes, hydrophytes and mesophytes.
- To study the external structural adaptations of any two in aspect of their terrestrial (cockroach) aquatic (fish, prawn) amphibious (toad, frog) reptilians (lizards, chameleons), aerial (birds) and burrowing (mole, rat, earthworm) features.
- To prepare a temporary mount of leguminous root nodules to study bacteria.

List of Activities:

- Group/Individual Assignments
- Information gathering and deducing
- Discussion and debate
- Science symposium/seminar
- Presentation on science concepts/experiments
- Model making
- Field Trip

Prescribed textbook:

Science Class IX Dr. N.K. Verma, Dr. J.P. Sharma, Dr. J.K. Juneja, J.N. Jaiswal Laxmi Publications Pvt. Ltd. 113, Golden House, Daryaganj, New Delhi - 110002

CLASS-X SCIENCE

Time: 3 hours

Unit-Wise weightage	Unit-	Wise	weigh	tage
----------------------------	-------	------	-------	------

Part 'A' External

Unit				Marks
I.	Materials			25
II.	Energy			24
III.	Living W	orld orld		20
IV.	Natural F	Resources		05
V.	Our envi	ronment		06
-			Total:	80
Part 'B	' Interna	1	Grand Total	20 100
PART-A	: EX	ΓERNAL		80 Marks/180 Periods
Unit I	Ma 1.1 1.2 1.3 1.4	Rate of Chemical I		_
Unit II	Enc	ergy: Light, Electricit	y and Energy	

Unit III Living World: Life Processes

Light

Electricity and its Effects

Sources of Energy

3.1	Life Processes I	10 marks
3.2	Life Processes II	٦
3.3	Heredity and Evolution	├ 10 marks

Unit IV Natural Resources

2.1

2.2

2.3

4.1 Management of Natural Resources 05 marks

Unit V Our Environment

5.2 Environment and Environmental Problems 06 marks

Unit I: MATERIALS-CHEMICAL SUBSTANCES- NATURE AND BEHAVIOUR

62 Periods

10 marks

08 marks

06 marks

Marks: 80

Rate of chemical reaction and chemical equilibrium: Elementary idea of rate of reactions, slow and fast reactions, reversible and irreversible reactions. Chemical equilibrium-dynamic nature (in brief); acids and bases (Lowry and Bronsted theory); pH scale; heat changes during chemical reactions. (10 periods)

Some important chemical compounds: Preparation/manufacture (in brief), properties and uses of- washing soda, bleaching powder and Plaster of Paris. Manufacture and properties of some important building materials—lime, cement, glass and steel.

(10 periods)

Metals and non-metals: Metals- Minerals and ores; metallurgy- enrichment of ores, extraction of metals from ores, their refinement and purification (with reference to iron and aluminium); activity series of metals, general properties and corrosion of metals. Alloys – components, properties and uses of steel, stainless steel, brass and magnelium, Alloying of gold. Non-metals – physical and chemicals properties of non-metals; preparation, properties and uses of hydrogen, ammonia, sulphur, sulphuric acid. (26 periods)

Carbon compounds: Carbon; carbon-tetravalency and catenation; Functional groups (oxygen containing only); Preparation, properties and uses of ethanol and formaldehyde; Carboxylic acids – preparation, properties and uses of acetic acid; some common synthetic polymers, soaps and detergents. (16 periods)

Unit II: ENERGY-LIGHT, ELECTRICITY AND ENERGY

48 Period

Light: Nature of light – theories of light; reflection of light – laws of reflection, reflection from plane and curved surfaces; mirror – plane, concave and convex; sign conventions; derivation of mirror formula, magnification. Laws of refraction; refraction through a rectangular slab; image formation by concave and convex lenses; lens formula (with simple treatment); sign conventions; power of lens; some optical phenomena in nature (twinkling of stars, mirage); defects of vision and their correction.

Construction and working of a compound microscope and an astronomical telescope; Dispersion of white light by a glass prism; composition of white light, colour of objects and pigments, super imposition of light of primary colours. (20 periods)

Electricity and its effects: Potential and potential difference, electric current, Ohm's Law, combination of resistances in series and parallel; heating effects of electric current and its applications; Power, commercial unit of electrical energy.

Electrolysis—Faraday's Laws (excluding equations), electroplating, electrochemical cells—dry cell; Magnetic field due to current carrying conductor—straight, coil, solenoid (qualitative idea only), electromagnetic induction, electric motor and generator (DC), direct and alternating current (qualitative idea), domestic electric circuits, safety measures in using electricity.

(18 periods)

Sources of energy: Renewable and non-renewable sources. Renewable sources—solar energy—solar cooker, solar water heater, solar cell; wind energy—hydro energy—hydroelectricity, geothermal, biogas, hydrogen; Non- renewable sources—fossil fuels-coal-destructive distillation of coal (in brief), petroleum and natural gas; conditions of combustion; choice of a good fuel; efficient use of fuels. Nuclear fusion, nuclear fission, chain reaction, nuclear reactors (basic principle and safety measures), advantages and hazards of using nuclear energy; judicious use of energy. (10 periods)

Unit III: LIVING WORLD - LIFE PROCESSES

46 Periods

Life processes I: Nutrition—modes of nutrition—autotrophic, heterotrophic, saprophytic, holozoic and parasitic; nutrition in plants—photosynthesis (main steps), factors affecting photosynthesis; nutrition in animals (main steps)—in amoeba and grasshopper; Human digestive system. Respiration and breathing, types of respiration (aerobic and anaerobic), respiration in plants and animals, respiration through skin, gills, air tube, lungs (earthworm, fish, grasshopper and human); structure and functions of respiratory organs in humans (elementary idea). Transportation in plants and animals; transportation in plants (water and minerals, food), transportation in human—role and composition of blood, blood clotting, blood groups and blood transfusion; structure and function of heart and blood vessels (elementary idea), lymphatic system; Excretion in animals (amoeba and earthworm); excretion in humans; osmoregulation. (20 periods)

Life processes II: Control and coordination – coordination in plants and animals; nervous system, reflex action, hormones in human beings (in brief). Reproduction – types, significance; Reproduction in plants- asexual reproduction- vegetative propagation in plants-cutting, grafting and layering; parthenogenesis; sexual reproduction- reproductive parts in plants; Pollination and fertilization. Reproduction in animals – fission, budding, regeneration; reproduction in humans; sexual cycle in female (in brief); fertilization in humans; artificial insemination, cloning (elementary idea only). (16 periods)

Heredity and evolution: Heredity and variation; physical basis of heredity—chromosomes, DNA (elementary idea only); genes; sex determination; organic evolution-theories of evolution (elementary idea only). (10 periods)

Unit IV: NATURAL RESOURCES

8 Periods

Management of natural resources: Conservation and judicious use of natural resources, Regional Environment: Adverse effects of hunting, logging, fishing with chemicals; Water harvesting, sustainability of natural resources.

Unit V: OUR ENVIRONMENT

16 Periods

Environment and environmental problems: Biodegradable and non-biodegradable materials; Solid waste management; Ecological balance – sustainable development, inter-relationship of population; Climate change; Global warming. Efforts for conservation and protection of the environment, environmental laws (mention only).

PART-B: INTERNAL 20 Marks

Area of Assessment	Marks
1. Experiments/Activities	10
2. Records	5
3. Formal Test	5
Total	20

Experiments and activities should be conducted alongside the concepts taught in theory classes. The students should be assessed on a continuous and comprehensive basis. The role of a teacher assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

A student is expected to perform and record at least 3 experiments and 2 activities in each period of assessment from the list suggested below. Thus, a student shall perform a total of at least 6 (six) experiments and 4 (four) activities, at least one from each unit, throughout the academic year.

List of Experiments:

• CHEMICAL SUBSTANCES- NATURE AND BEHAVIOUR

- To find the pH of given samples by using pH paper-
 - (a) Dilute hydrochloric acid, (b) Dilute solution of sodium hydroxide, (c) Dilute solution of ethanoic acid, (d) Lemon juice, (e) Water (distilled), (f) dilute solution of sodium bicarbonate.
- To measure the change in temperature during chemical reactions (at least 4) and conclude whether the reaction is exothermic or not.
- To identify bleaching powder from a given sample of chemicals (4-5 samples).

- To identify washing soda or baking soda from given samples of chemicals (4 samples).
- To verify the dynamic nature of equilibrium by conducting any two reversible reactions.
- (a) To carry out the reactions of an acid (HCL) with (i) litmus solution (blue and red), (ii) zinc metal (iii) sodium carbonate and (iv) sodium hydroxide.(b) To carry out the reactions of a base (NaOH) with (i) litmus solution (blue and red), (ii) aluminium metal, and (iii) hydrochloric acid.

• LIGHT, ELECTRICITY AND ENERGY

- To verify the laws of reflection of light using plane mirror.
- To determine the focal length of a concave mirror by obtaining image of a distant object.
- To trace the path of a ray of light passing through a rectangular glass slab and measure the angle of incidence and the angle of emergence.
- To determine the focal length of a convex lens by focusing a distant object.
- To trace the path of the rays of light passing through a glass prism.
- To study the dependence of current on the potential difference across a resistor and determine its resistance.
- To find out the resultant resistance of two resistors connected in (i) series, and (ii) parallel.

• LIFE PROCESSES

- To study binary fission for budding with the help of prepared slides.
- To determine the percentage of water absorbed by raisins.
- To prepare a temporary mount of a leaf peel to show stomata.
- To show that light is necessary for photosynthesis.
- To show that oxygen evolves during photosynthesis.
- To show that carbon dioxide is produced during respiration.
- To show transpiration in plants.
- To grow different plants by different methods of propagation.
- To make a list of the different blood groups of your class.
- To dissect and study the structure of a complete flower.

• NATURAL RESOURCES

- To find out about the organisations in your neighbourhood/village/town, those are active in the spread of awareness about our environment and promote activities and attitudes that lead to the conservation of our environment and natural resources.
- To find about any two forest produce that are the basis for an industry. And to find out whether this industry is sustainable in the long run and whether do we need to control our consumption of these products.

• OUR ENVIRONMENT

- To find out what happens to the waste generated at home. And to find out how the local body (Panchayat, Municipal Corporation, resident welfare organisations) deal with the waste.
- To find out how the sewage in your locality is treated.
- To find out how the local industries in your locality treat their wastes.

- To search from the library/internet how to treat hazardous materials before disposing them.
- To find out the areas suffering chronic water shortage.
- To study the rainfall patterns of your state. Identify the regions where water is abundant and the regions of water scarcity.

List of Activities:

- Group/Individual Assignments
- Information gathering and deducing
- Discussion and debate
- Science symposium/seminar
- Presentation on science concepts/experiments
- Model making
- Field Trip

Prescribed textbook:

Science Class X Dr. N.K. Verma, Dr. J.P. Sharma, Dr. J.K. Juneja, J.N. Jaiswal Laxmi Publications Pvt. Ltd. 113, Golden House, Daryaganj, New Delhi - 110002

SOCIAL SCIENCES

Objectives:

- to develop an understanding of the processes of change and development both in terms of time and space;
- to deepen knowledge about an understanding of India's freedom struggle and of the values and ideals that it represented;
- to help learners understand and cherish the values enshrined in the Indian Constitution and to prepare them for their roles and responsibilities as effective citizens of a democratic society;
- to deepen the knowledge and understanding of India's environment in its totality, their interactive processes and effects on the future quality of the life of the people;
- to develop an appreciation of the richness and variety of India's heritage both natural and cultural and the need for its preservation;
- to promote an understanding of the issues and challenges of contemporary India environmental, economic and social, as part of the development process;
- to help pupils acquire knowledge, skills and understanding to face the challenges of contemporary society as individuals and groups and learn the art of living a confident and stress-free life as well as participating effectively in the community;
- to develop scientific temper by promoting the spirit of enquiry and following a rational and objective approach in analyzing and evaluating information, views and interpretation;
- to develop academic and social skills such as critical thinking, communicating effectively both in visual and verbal forms co-operating with others, taking initiatives and providing leadership in solving others' problems;
- to develop qualities clustered around the personal, social, moral, national and spiritual values that make a person humane and socially effective.

DESIGN OF QUESTION PAPER SOCIAL SCIENCES

Weightage to different forms of questions:

Sl. no.	Forms of questions	Marks for each	No. of questions	Total marks
		question		
1.	MCQ	1	10	10
2.	VSA	1	10	10
3.	SA-I	2	6	12
4.	SA-II	4	6	24
5.	LA	6	4	24
	Total		36	80

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1.	Easy	30	24
2.	Average	50	40
3.	Difficult	20	16
	Total	100	80

The expected length of answer and time to be taken under different forms of questions shall be as follows:

Sl. no.	Forms of	Expected length of	Expected time for	Total expected
	questions	answer	each question	time
1.	MCQ	-	1 minute	10 minutes
2.	VSA	One word/one	2 minutes	20 minutes
		sentence not more		
		than 15 words		
3.	SA-I	20-30 words	5 minutes	30 minutes
4.	SA-II	50-70 words	8 minutes	48 minutes
5.	LA	70-120 words	13 minutes	52 minutes
6.	Reading Question	-	-	20 minutes
	Paper and revision			
			Total time	180 minutes

Scheme of options:

- i. Internal choice in 4 (four) questions of 4 marks each
- ii. General choice in 6 marks questions.

CLASS-IX SOCIAL SCIENCES

Unit-Wise weightage

Part 'A	A' External Time: 3 ho	ours	Marks : 80
Unit			Marks
I.	India and the World		18
II.	Topography of India		18
III.	Democratic politics		18
IV.	Understanding an Economy		16
V.	Nagaland (History and Personalities - a	separate textbook)	10
	П	Total	80
Part '	B' Internal		20
		Grand Total	100

PART – A: EXTERNAL

80 Marks/180 Periods

Unit I: India and the World

18 marks/44 periods

French Revolution : The ancien regime and its crisis, the social forces that led to the revolution, the different revolutionary groups and ideas of the time, the legacy.

Russian Revolution: The crisis of Tzarism, the nature of social movements between 1905 and 1917, the First World War and foundation of Soviet State, the legacy.

Rise of Nazism : The growth of social democracy, the crisis in Germany, the basis of Hitler's rise to power, the ideology of Nazism, the impact of Nazism.

Indian National Movement : Indian National Congress-rise of extremism, Boycott and Swadeshi Movements, Muslim League, Revolutionary Movements, emergence of Gandhi.

Unit II: Topography of India

18 marks/44 periods

India: Location, relief, structure, major physiographic units.

Climate: Factors influencing the climate, monsoon- its characteristics, seasons.

Drainage: Major rivers and tributaries, lakes and seas, role of rivers in the economy.

Natural Vegetation: Vegetation types, need for conservation and various measures.

Wildlife: Major species, need for conservation and various measures.

Map Reading (including drawing and insertion): Kinds of maps, classification of maps on the basis of Scale and Themes.

Unit III: Democratic Politics

18 marks/42 periods

Democracy: Meaning, types, alternatives to democracy.

Democracy in India : Framing of Indian Constitution, salient features of the Constitution, designing and redesigning of Indian Constitution.

Electoral Politics: Election of representatives, importance of citizens participation in electoral politics, measures to ensure free and fair elections.

Institution of Parliamentary Democracy: Parliament, it's role in democracy.

Citizens' Rights in a Democracy : Fundamental Rights, relationship of Fundamental Rights and Judiciary, Independence of Judiciary.

Unit IV: Understanding an Economy

16 marks/35 periods

Economics: Its meaning, types of economy, features of Indian economy, public sector, private sector, joint sector.

Population : Size, distribution, age- sex composition, population change- migration as a determinant of population change, occupational structure and National

Population Policy: adolescents as under-served population group with special needs.

Poverty: Meaning, causes of poverty, poverty alleviation programmes, food security, source of food grains.

People as resource : Introduction of how people become resource/asset, quality of human resource, role of health and education, unemployment, types of unemployment, unemployment as a form of non-utilization of human resource, strategies to combat unemployment.

Unit V: Nagaland (History and Personalities)

10 marks/15 periods

PART-B:	INTERNAL	20 Marks
1.	Activities	10
2.	Assignment	5
3.	Formal Testing	5

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbooks:

- 1. A textbook of Social Sciences Class IX I.L. Wanchoo, Arun Kumar
- Goyal Brothers Prakashan 11/1903, Chuna Mandi, Pahar Ganj, New Delhi – 110 055
- 2. A book on Nagaland (supplementary) for Classes IX & X
- NBSE, Kohima

CLASS-X SOCIAL SCIENCES

Unit-Wise weightage

Part 'A	A' External Time : 3 hours	Marks : 80
Unit		Marks
I.	India and the Contemporary World	18
II.	Resources (India)	18
III.	Democratic Politics	18
IV.	Understanding an Economy	16
V.	Nagaland (Geography & G.K a separate textbook)	10
	Total:	80
Part '	B' Internal	20
	Grand Total	100

PART-A: EXTERNAL:

80 Marks/180 Periods

Unit I: India and the contemporary world

18 marks/44periods

a. Nationalism in Europe:

- * The growth of nationalism in Europe after the 1830's.
- * The ideas of Giuseppe Mazzini etc.
- * General Characteristics of the Movements in Poland, Hungary & Greece.

b. Nationalist Movement in Indo-China:

- * French colonialism in Indo-China.
- * Phases of struggle against the French.
- * The Second World War and the struggle for liberation.

c. Nationalism in India:

- * Satyagraha Movement.
- * Movements of peasants, workers, tribals.
- * Simon Commission.
- * INA, Cabinet Mission.

d. Trade and Globalization:

- * Expansion and integration of the world market.
- * Trade and economy between the two wars.
- * Shifts after the 1950s.
- * Impact of globalization.

Unit II: Resources (India)

18 marks/44 periods

a. Resources: Types, need for resource planning.

Natural Resources:

Land : Changing land use pattern, land degradation, soil types and conservation measures.

Water Resources: Multipurpose projects, need for conservation and management, rain water harvesting.

Mineral: Types, economic importance and conservation.

b. Power Resources:

* Types of Power resources – conventional and non-conventional, utilization and conservation.

c. Agriculture:

* Types of farming, major crops, cropping pattern, technological and institutional reforms, their impact, contribution of agriculture to national economy.

d. Manufacturing Industries:

- * Types, contribution of industries to the national economy.
- * Industrial pollution and degradation of environment.
- Measures to control degradation.

e. Transport and Communication:

* Types and importance.

f. Map Reading:

* Uses of map, classification of map basing on functions, grid reference.

Unit III: Democratic politics

18 marks/42 periods

a. Working of democracy:

- * Division in the working of democracy.
- * Effects of caste on politics and of politics on caste.
- * Gender division in politics.
- * Effects of communalism in democracy.

b. Power sharing mechanisms in democracy:

- * Division of power in democracies.
- * Indian Federalism towards national unity.
- * Decentralization and national unity.
- * Accommodation of different social groups in democracy.

c. Competition and contestations in democracy:

- * Shaping of democracy in favour of ordinary people.
- * Role of political parties in competition and contestations.
- * Party system in India.

d. Outcomes of democracy:

- * Democracy and its outcomes.
 - Expectations of democracies with special reference to India.
- * Development, security and dignity for the people in democracy.
- * Factors that sustains democracy in India.

e. Challenges to democracy:

- * Challenges to Indian democracy.
- * Reforming and deepening of democracy.
- * Role of an ordinary citizen in deepening democracy.
- * Is the Idea of democracy shrinking?

Unit IV: Understanding an economy:

16 marks/35 periods

a. Development:

- * Traditional notion of development National Income and Per-Capita Income.
- * Growth of NI critical appraisal of existing development indicators (PCI, IMR,SR and other income and health indicators).
- * The need for health and educational development-Human Development Indicators (in simple and brief) as a holistic measures of development.

b. Money and financial system:

- * Role of money in an economy.
- * Formal and informal financial institutions for savings and credit
- * One formal institution such as a nationalized commercial bank and a few informal institutions Local money lenders, landlords, self help groups, chit funds and private finance companies.

c. Role of Service Sector in Indian Economy:

- * Service sector and its importance in generating employment and income to the nation.
- * Growth of service sector in India.
- * India as a major service provider to the world.
- * Need for public investment.
- * The role of important infrastructure- education and health.

d. Consumer awareness:

- * Exploitation of consumer and its causes.
- * Rise of consumer awareness.
- * Consumer's responsibility in a market.
- * Role of government in consumer protection.

Unit V: Nagaland (Geography & G.K.)

10 marks/15 periods

PART-B: INTERNAL	20 Marks
1. Activities	10
2. Assignment	5
3. Formal Testing	5

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbooks:

- 1. A textbook of Social Sciences Class X I.L. Wanchoo, Arun Kumar
- Goyal Brothers Prakashan 11/1903, Chuna Mandi, Pahar Ganj, New Delhi – 110 055
- 2. A book on Nagaland (supplementary) for Classes IX & X
- NBSE, Kohima

BOOK KEEPING & ACCOUNTANCY

Objectives:

- to enable the students to understand the fundamental principles and concepts of Book Keeping and Accountancy
- to understand the basic concepts of accounting
- to develop accounting equation
- to develop the skills of preparing and maintaining cash book
- to enable the students to practically involve themselves in the day to day financial activities
- to enable the students in recording transactions, passing journal entries, posting to ledger accounts and preparing trial balance
- to develop skills of preparing and maintaining simple accounts, books and records.

DESIGN OF QUESTION PAPER BOOK-KEEPING & ACCOUNTANCY

Weightage to different forms of questions:

Sl.no.	Forms of questions	Mark for each question	No. of questions	Total marks
1.	MCQ	1	10	10
2.	SA -I	2	6	12
3.	SA -II	3	6	18
4.	LA	5	6	30
	Total		28	70

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1.	Easy	20	14
2.	Average	60	42
3.	Difficult	20	14
	Total	100	70

The expected length of answer and time to be taken under different forms of questions shall be as follows:

Sl.no.	Forms of	Expected length of	Expected time for	Total expected
	questions	answer	each question	time
1.	MCQ	-	1.5 minutes	15 minutes
2.	SA -I	20-30 words	5 minutes	30 minutes
3.	SA -II	30-50 words	7 minutes	42 minutes
4.	LA	70-100 words	13 minutes	78 minutes
5.	Revision	-	-	15 minutes
			Total time	180 minutes

Scheme of options:

- 1. There will be no overall choice.
- 2. Internal choice in 5(five) questions of 5 marks each

CLASS-IX BOOK KEEPING & ACCOUNTANCY

U	nit-	Wise	weig	htage
\mathbf{c}	1110	11100	"" ~ - 5	···ugu

External Time: 3 hours	Marks : 70
	Marks
Introduction	8
Basic Accounting Concepts	8
Source Documents and Accounting Equation	10
Cash Book	12
Rules of Debit and Credit – Journal	12
Ledger Accounts	10
Trial Balance	10
Total	70
'B' Internal	30
Grand Total	100
	Introduction Basic Accounting Concepts Source Documents and Accounting Equation Cash Book Rules of Debit and Credit – Journal Ledger Accounts Trial Balance Total 'B' Internal

PART – A:EXTERNAL

70 Marks/180 Periods

Unit I: INTRODUCTION TO BOOK KEEPING AND ACCOUNTANCY

8 marks/15 periods

Need for Book Keeping; Objectives and advantages of Book Keeping and Accountancy.

Unit II: BASIC ACCOUNTING CONCEPTS

8 marks/10 periods

Basic Accounting Concepts - Business Entity Concept, Money Measurement Concept, Going Concern Concept, Accounting Period Concept, Dual Aspect Concept. Double Entry System.

Unit III: SOURCE DOCUMENTS AND ACCOUNTING EQUATION

10 marks/20 periods

Origin of Transactions, Source Documents, Vouchers and its features, Accounting equation, Effect of transaction on Accounting equations.

Unit IV: CASH BOOK

12 marks/35 periods

Necessity of Cash Book, Types of Cash Books, Cash column, Cash and Bank column, Petty Cash Book and Imprest system.

Unit V: RULES OF DEBIT AND CREDIT-JOURNAL 12 marks/40 periods

The Concept of Debit and Credit, Definition of Debit and Credit. Classification of Accounts, Rules of Debit and Credit. Journal – Meaning, Advantages/Need and Limitations. Journal Entries.

Unit VI: LEDGER ACCOUNTS

10 marks/40 periods

Ledger Accounts – Meaning, Classification, Importance/Advantages of Ledger Accounts, Ledger Posting from Journal Entries, Balancing of Ledger Accounts, Ledger Posting from Cash Book, Ledger Posting from Purchases Book and Ledger Posting from Sales Book. Rules of Posting from Subsidiary Books. Distinction between Journal and Ledger.

Unit VII: TRIAL BALANCE 10 marks/20 periods

Trial Balance – Meaning, Purpose and Functions of Trial Balance, Limitations of Trial Balance and Methods of Preparing Trial Balance by Balance Method.

PART-B:	INTERNAL		30 Marks
1.	Project work	-	20
2.	Assignments	-	5
3.	Formal testing	-	5

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbook:

Book Keeping & Accountancy Class IX - Laxmi Publications (P) Ltd.
A. S. Siddiqui - Laxmi Publications (P) Ltd.
113, Golden House, Darya Ganj,

New Delhi – 110 002.

CLASS-X BOOK KEEPING & ACCOUNTANCY

Unit-Wise weightage

Part 'A'	External Time: 3 hours		Marks : 70
Unit			Marks
I.	Final Accounts (Without Adjustments)		15
II.	Banking		10
III.	Bank Reconciliation Statement		10
IV.	Bills of Exchange		10
V.	Errors and their rectification		10
VI.	Depreciation		15
		Total:	70
PART-	B: Internal		30
Grand Total			100

PART-A: EXTERNAL 70 Marks/180 Periods

Unit I: FINAL ACCOUNTS (WITHOUT ADJUSTMENTS)

15 marks/45 periods

Final Accounts – Meaning and Limitations, Trading Account – Meaning, Need and Purpose, Proforma; Profit and Loss Account – Meaning, Need and Purpose, Proforma; Balance Sheet – Meaning, Need and Purpose, Proforma, Preparation of Trading, Profit and Loss Account and Balance Sheet of a Sole Trader (without adjustments).

Unit II: BANKING

10 marks/30 periods

Types of Accounts and their operation; ATM, Debit and Credit Card, E – banking.

Unit III: BANK RECONCILIATION STATEMENT

10 marks/30 periods

Utility and preparation.

Unit IV: BILLS OF EXCHANGE

10 marks/25 periods

Bills of Exchange – Meaning, Characteristics, Parties, Specimen, Elements.

Promissory Notes – Meaning, Characteristics, Parties, Specimen, Difference

between Bills of Exchange and Promissory Notes.

Unit V: ERRORS AND THEIR RECTIFICATION

10 marks/20 periods

Types of errors and entries for their rectification.

Unit VI: DEPRECIATION

15 marks/30 periods

Meaning, Definition, Special features, Causes, Objectives, Factors, Methods, Advantages and Disadvantages.

PART-B:	INTERNAL	30 Marks
1.	Project work	20
2.	Assignments	5
3.	Formal testing	5

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbook:

Book Keeping & Accountancy Class X - Laxmi Publ A. S. Siddiqui 113, Golden

Laxmi Publications (P) Ltd. 113, Golden House, Darya Ganj, New Delhi – 110 002.

ENVIRONMENTAL EDUCATION

Objectives:

- to develop an awareness of the environment and its problems;
- to develop basic knowledge and understanding of the environment and its interrelationship with man, including indigenous tradition and cultural practices related to the environment;
- to develop habits, values, attitudes and emotions to maintain and promote 'quality environment' for human survival;
- to develop skills to solve environmental problems through participation and designed activities.
- to develop ability to assess the outcomes of environmental action and initiatives;
- to develop a sense of responsibility and urgency to ensure appropriate action to solve environmental problems;
- to make learners recognize the need for protecting, preserving and conserving environment and its resources.
- it lays emphasis on three aspects:
 - Learning *about* the environment.
 - Learning *through* the environment, implying a systematic exploration through a variety of activities,
 - Learning *for* the environment by developing a genuine concern and sensitivity towards its protection and preservation.
- The ultimate goal of Environmental Education is action
 - to improve the environment
 - to prevent its degradation and
 - to sustain its well being.

Above all, one of the main objectives of Environmental Education is to make learners love the environment and to commit themselves to protect the environment at any cost.

DESIGN OF QUESTION PAPER ENVIRONMENTAL EDUCATION

Weightage to different forms of questions:

Sl. no.	Forms of questions	Marks for each	No. of questions	Total marks
		question		
1.	MCQ	1	10	10
2.	VSA	1	6	6
3.	SA-I	2	8	16
4.	SA-II	3	7	21
5.	LA-I	5	3	15
6.	LA-II	6	2	12
	Total		36	80

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1.	Easy	20	16
2.	Average	60	48
3.	Difficult	20	16
	Total	100	80

The expected length of answer and time to be taken under different forms of questions shall be as follows:

Sl.no.	Forms of	Expected length of	Expected time for	Total
	questions	answer	each question	expected time
1.	Reading	-	-	10 minutes
2.	MCQ	-	2 minutes	20 minutes
3.	VSA	One word/One sentence (not	2 minutes	12 minutes
		more than 15 words)		
4.	SA-I	20-30 words	4 minutes	32 minutes
5.	SA-II	30-50 words	6 minutes	42 minutes
6.	LA-I	50-70 words	10 minutes	30 minutes
7.	LA-II	70-100 words	12 minutes	24 minutes
8.	Revision	-	-	10 minutes
			Total time	180 minutes

Scheme of options:

i. Internal choice in 5 marks and 6 marks questions.

CLASS-IX ENVIRONMENTAL EDUCATION

Unit-Wise weightage

Part 'A	'External Time: 3 hours	Marks : 80
Unit		Marks
I.	Understanding Ecosystem	25
II.	Depletion of Resources	20
III.	Waste Generation and Management	25
IV.	Environmental Values and Ethics	10
	Total	80
PART	'B' Internal	20
	Grand Total	100

PART-A: EXTERNAL

80 Marks/180 Periods

Unit I: Understanding Ecosystem

25 marks/55 periods

Types of ecosystem – forest, grassland, desert, aquatic, coastal, marine.

Interaction between biotic and abiotic factors in an ecosystem.

Energy flow and its importance, cycles of nutrients in terrestrial and aquatic (fresh water and marine) ecosystems, nature's mechanism in maintaining balance.

Destruction of ecosystem due to changing patterns of land use: factors responsible for this – population growth, migration, industrialization and urbanization, dwelling units, transport; encroachment on water bodies, forests and agricultural land, shifting cultivation; facilities for tourism, pilgrimage, recreation and adventure; construction of large dams, mining and war.

Impact of ecosystem destruction – loss of habitat, stress on resources.

Conservation of ecosystem – alternative practices including indigenous conservation practices, planning for proper land use.

Role of Environmental Impact Assessment (EIA) in maintaining the quality of the environment.

Unit II: Depletion of Resources

20 marks/45 periods

Natural resources – air, water, soil, minerals, forests and fuels.

Causes of depletion of resources – over-use/irrational use, non-equitable distribution of resources, technological and industrial development, population growth.

Impact of resource depletion – imbalance in nature, shortage of materials, struggle for existence; slackening of economic growth.

Practices for conservation of resources – search for alternatives, promotion of renewable resources.

Unit III: Waste Generation and Management

25 marks/55 periods

Sources of waste – domestic, industrial, agricultural, and commercial.

Classification of waste – bio-degradable, non-biodegradable; toxic, non-toxic, bio medical.

Impact of waste accumulation – spoilage of landscape, pollution, health hazards, effect on terrestrial and aquatic (fresh water and marine) life.

Need for management of waste.

Methods of safe disposal of waste – segregation, dumping, composting, drainage, treatment of effluents before discharge, incineration, use of scrubbers and electrostatic precipitators.

Need for reducing, reusing and recycling waste.

Legal provisions for handling and management of waste.

Unit IV: Environmental Values and Ethics

10 marks/25 periods

Human rights, fundamental duties and value education.

Women and Child Welfare.

PART-B: INTERNAL

20 Marks

The internal assessment should be based on continuous and comprehensive evaluation. The allotment of marks shall be as follows

1. Project 16 marks

2. Formal testing

4 marks

In each period of assessment, a minimum of four projects must be conducted basing on the suggested projects in the textbook, the available resources and take cognizance to the local environmental problem.

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbook:

A textbook of Environmental Education Class IX - Dr. M. P. Mishra

S. Chand & Company Ltd. Dilip commercial (1st Floor) M.N. Road, Pan Bazar, Guwahati – 781001, Assam

CLASS-X ENVIRONMENTAL EDUCATION

Unit-Wise weightage

Part 'A'	External Time: 3 hours		Marks: 80
Unit			Marks
I.	Restoring Balance in Ecosystem		25
II.	Pollution		17
III.	Issues of the Environment		21
IV.	Striving for a better Environment		17
		Total:	80
PART	B' Internal		20
		Grand Total	100

PART-A: EXTERNAL:

80 Marks/180 Periods

Unit I: Restoring Balance in Ecosystem

25 marks/55 periods

- * Need for adopting control measures to check for spoilage of landscape.
- * Need for conservation and management of water integrated watershed management, recharging of ground water including rain water harvesting, development of appropriate technology.
- * Conservation and management of forests, grasslands, semi-arid ecosystems.
- * Conservation and management of ocean resources marine and coastal ecosystems, importance of coral reefs.
- * Conservation and management of soil alternate cropping, judicious use of inputs like water, fertilizers, pesticides; use of manure, bio-fertilizers and bio-pesticides; plantation and conservation of grasslands to check soil erosion; forest conservation including Joint Forests Management (JFM), afforestation including social forestry and agro-forestry.
- * Measures to conserve wildlife national parks, sanctuaries and bio-reserves; breeding programmes for endangered species; preventing poaching, hunting and bio-piracy; enforcement of legal provisions.
- * Application of bio-technology.
- * Public awareness programmes concerning conservation of water, soil, air, forests and other resources.
- * Relevance of indigenous practices.
- * Tribal culture and its linkage to forest resources and their conservation.

Unit II: Pollution

17 marks/30 periods

- * Types of pollution air, water (fresh and marine), soil, radiation and noise.
- * Sources of pollution and major pollutants; oil spills.
- * Effects of pollution on environment, human health and other organisms.
- * Abatement of pollution.

Unit III: Issues of the Environment

21 marks/55 periods

- * Decline in forest, agricultural and marine productivity and its effects on economy.
- * Resettlement and rehabilitation of people.
- * Energy crisis urban and rural sectors.
- * Greenhouse effect and global warning.
- * Climatic changes.

- * Acid rain.
- * Ozone layer depletion.
- * Disaster natural and man-made; disaster management and its mitigation.

Unit IV: Striving for a Better Environment

17 marks/40 periods

- * Use of efficient and eco-friendly technology.
- * Sustainable use of resources.
- * Adoption of indigenous practices; sacred groves.
- * Consumer education consumer rights, making correct choices while buying different items, food adulteration.
- * Community participation for ecological restoration and conservation.
- * Protection of wildlife; stopping of cruelty to animals.
- * Enforcements of acts, laws and policies.
- * Some success stories use of CNG, Chipko Movement, water harvesting, Silent Valley and the like.

PART-B: INTERNAL

20 Marks

The marks awarded for internal assessment should be based on continuous and comprehensive evaluation. The allotment of marks shall be as follows.

1. Project 16 marks

2. Formal testing

4 marks

In each period of assessment, a minimum of four projects must be conducted basing on the suggested projects in the textbook, the available resources and take cognizance to the local environmental problem.

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbook:

Texbook of Environment Education – A. N. Rai

Goyal Brothers Prakashan 11/1903, Chuna Mandi, Pahar Ganj, New Delhi – 110 055

HOME SCIENCE

Objectives:

- To develop the art of co-operative living in the family and community.
- To develop the necessary attitudes, abilities, skill and techniques essential for group living and getting along with others.
- To help the pupils to understand their role and responsibilities in the family and community, in the management of resources and the duties of future parents.
- To develop an appreciation of social, religious and cultural values.
- To develop sound judgement and ability to make decisions.
- To develop the ability to do household work, such as cleaning, cooking, maintaining accounts, entertaining and looking after children.
- To cultivate good habits of health and hygiene.
- To impart knowledge of facts of health, nutrition, hygiene and other aspects of family living.
- To learn ways and means to supplement family income.
- To impart knowledge of the aesthetic, hygienic and economical value of clothing.

DESIGN OF QUESTION PAPER HOME SCIENCE

Weightage to different forms of questions:

Sl.no.	Forms of questions	Mark for each	No. of questions	Total marks
		question		
1.	MCQ	1	10	10
2.	SA -I	2	12	24
3.	SA -II	3	7	21
4.	LA	5	3	15
	Total		32	70

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1.	Easy	25	18
2.	Average	60	42
3.	Difficult	15	10
	Total	100	70

The expected length of answer and time to be taken under different forms of questions shall be as follows:

Sl.no.	Forms of questions	Expected length of answer	Expected time for each question	Total expected time
1.	MCQ	or answer	2.5 minutes	25 minutes
2.	SA -I	20-30 words	4 minutes	48 minutes
3.	SA -II	40-60 words	8 minutes	56 minutes
4.	LA	80-100 words	12 minutes	36 minutes
5.	Reading of Question Paper &Revision	-	-	15 minutes
			Total time	180 minutes

CLASS-IX HOME SCIENCE

Times . 2 hours

Unit-Wise weightage

Concept objective and scope of Hom		Marks
Concept objective and scope of Hom		17141115
Concept, objective and scope of from	ie Science	08
Family-a unit of society		10
Food and its relation to health		08
Cooking of food		10
Food preservation		07
Functions of a home		08
Safety in the house		07
Fabrics		07
Selection of clothes		05
To	otal	70
Part 'B' Internal 30		
G	rand Total	100
	Family-a unit of society Food and its relation to health Cooking of food Food preservation Functions of a home Safety in the house Fabrics Selection of clothes To	Food and its relation to health Cooking of food Food preservation Functions of a home Safety in the house Fabrics Selection of clothes Total

PART - A: EXTERNAL

70 Marks/180 Periods

Manles . 70

Unit I: Concept, objective and scope of Home Science 8 marks/20 periods

Unit II: Family- a unit of society:

10 marks/22 periods

Definition of family, functions; types of family-nuclear, joint and extended (advantages and disadvantages); size of family- small and large (advantages and disadvantages); reasons for change in family, role of family and its smooth functioning, stages of family.

Unit III: Food and its relation to health:

8 marks/20 periods

Definition of food, nutrients, nutrition, food groups, balanced diet, functions of food, physiological function, psychological function, sociological function, inter-relationship between food and health.

Unit IV: Cooking of food:

10 marks/25 periods

Reasons for cooking, principles of cooking, methods of cooking, boiling, steaming, pressure cooking, frying, roasting and baking- brief description of each and suitability for food preparation.

Unit V: Food preservation:

7 marks/18 periods

Definition, importance of food preservation, principles of food preservation, causes of food spoilage, methods of food preservation.

Unit VI: Functions of a home:

8 marks/20 periods

Protective and social characteristics of functional house, sanitation, latrine, light, ventilation, drainage system, sewage system, water supply, surrounding, security, recycling and optimal utilization of gas.

Unit VII: Safety in the house:

7 marks/20 periods

Precaution of accidents in the kitchen and bathroom, first aid, burns, bruises and sprains, shocks, cuts and wounds, poisoning, electric shocks, safe use of fuels, drowning, snake bite.

Unit VIII: Fabrics:

7 marks/20 periods

Fibre and yarn, classification of fibre on the basis of origin and length; yarn making, fabric weaving (different types of weaves-plain, twill and satin), knitting and felting, blended fabrics.

Unit IX: Selection of clothes:

5 marks/15 periods

Meaning of clothing, functions of clothing, factors affecting selection of clothing- age, climate, occupation, occasion, figure, fashion, cost, comfort.

PART-B: INTERNAL

30 Marks

- 1. Observe your own family for type, size and role of each member. Record the activities of all members on any one typical day of a family.
- 2. Prepare food using different methods of cooking. Evaluate and record taste, texture and colour of food.
- 3. Prepare one food item using any method of food preservation (pickle, jam, jellies, squash etc).
- 4. Study your own house for light, ventilation, disposal of waste, water and surroundings and record your observations.
- 5. Study your house for measures of safety against accidents and give suggestions for improvement.
- 6. Preparation of first aid box and practice giving first aids to cuts, burns, fever, acids and bites.
- 7. Collect samples of fabrics available in the market and present a comparative picture on the basis of cost (optional), durability, appearance and burning test.
- 8. Identification of fabric-physical appearance and suitability.

The allotment of marks shall be as follows:

Practical exercises
 Practical record
 Formal testing
 marks
 marks

N.B. It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbook:

A textbook of Home Science Class IX - Nova Publications
Navneet Kaur Sandhu 4738/23, Ansari Road,
Darya Ganj, New Delhi – 110002.

CLASS-X HOME SCIENCE

Unit-Wise weightage

Part 'A'	External Time: 3 hours	Marks: 70
Units		Marks
I	Principles of growth and development of a child between birth to 3 years	09
II	Role of play and recreational activities during infancy stage	06
III	Nutrients	10
IV	Meal planning	05
V	Food hygiene and methods of storage of food	05
VI	Resources available to family	05
VII	Money management	05
VIII	Consumer education	07
IX	Interior decoration	08
X	Care of clothes, quality check of apparel	10
	Total	70
Part 'B' Internal		
	Grand Total	100

PART-A: EXTERNAL:

70 Marks/180 Periods

Unit I: Principles of growth and development of a child between birth to 3 years 9 marks/25 periods

Principles of growth and development of a child, growth and development of children between birth to 3 years. Important milestones in physical, motor, social, emotional and language development of children, physical, social and emotional needs of children.

Unit II: Role of play and recreational activities during infancy stage:

6 marks/15 periods

Play- Meaning, need and types of play in children between birth to 3 years. Characteristics of play- active, passive, natural, serious and explanatory. Play materials for children- Characteristics of play material. Role of books, music, rhymes, games, radio, TV, and computer in the life of a child upto 3 years of age.

Unit III: Nutrients:

10 marks/ 25 periods

Functions, sources and deficiency of Carbohydrates, Proteins, Fats, , Calcium, Phosphorus, Iron and Iodine and Vitamins- Vitamins A, B, C, D, E and K. Loss of nutrients during cooking, conservation and enhancement of nutrients.

Unit IV: **Meal planning:**

5 marks/15 periods

Concept need and factors affecting meal planning- age, sex, climate, occupation, physical needs, number of family members, economics status of family, availability of food, family traditions, likes and dislikes and occasion. Food Groups (Basic: 5 suggested by ICMR), use of Food Groups in planning balanced diet, food allowance suggested by ICMR.

Unit V: Food hygiene and method of storage of food: 5 marks/10 periods

Rules of hygienic handling of food, methods of storage of perishable, semiperishable and non-perishable foods.

Unit VI: Resources available to family: 5 marks/ 10 periods

Types of resources- Human (energy, time, knowledge and skills). Non-human (money, material goods and community resources). General characteristics of resources, factors affecting wise use of resources, personal and shared.

Unit VII: Money management: 5 marks/ 12 periods

Family income and expenditure, importance of saving, investment.

Unit VIII: Consumer education: 7 marks/21 periods

Consumer rights and responsibilities, consumer problem, malpractices of traders- price variation, poor quality, adulteration, faulty weights and measures, non-availability of goods, misleading information, lack of standardized products, misleading advertisement, aids to help consumers-standardization marks, labels, packages, advertisement, pamphlets and leaflets.

Unit IX: Interior decoration: 8 marks/ 22 periods

Elements of arts, principles of design. Flower arrangement- definition, different steps of flower arrangement, types and materials used in flower arrangement.

Unit X: Care of clothes and quality check of apparel: 10 marks/ 25 periods

Cleaning and finishing agents used in everyday, care of clothes in the homes, stain removal (precautions and methods), laundering and storage of cotton, silk, wool and synthetics. Quality check of apparel: Workmanship of readymade, tailor-made garments, reading of labels of clothes.

PART-B INTERNAL 30 Marks

- 1. Observe and record physical and motor characteristics of a child at any given stage between 0 to 3 years of age.
- 2. Observe play activities of children between 1-3 years of age. Record their interest and characteristics of play materials.
- 3. Make a suitable play object for a child between 0-3 years.
- 4. Prepare dishes using method of enhancements of nutrients.
- 5. Plan a balance meal for your family for a day.
- 6. Prepare useful household items from recycling waste materials.
- 7. List any five mal-practices you have observed in the market.
- 8. Practice basic stitches tacking, running, hemming and backstitch.
- 9. Remove common stains curry, paint, ball pen ink, lipstick, blood, rust, tea and coffee.
- 10. Launder and finish cotton, silk, wool and synthetic materials.
- 11. Examine the quality of a stitched garment. Read the label on a readymade garment.
- 12. Arrange a flower using different methods of flower arrangement considering the principle of design and elements of art.

The allotment of marks shall be as follows:

Practical exercises
 Practical record
 Formal testing
 marks
 marks

N.B. It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbook:

A textbook of Home Science Class IX Navneet Kaur Sandhu Nova Publications 4738/23, Ansari Road, Darya Ganj, New Delhi – 110002.

FOUNDATION OF INFORMATION TECHNOLOGY

Objectives:

General:

- 1. To familiarize with basic of information technology.
- 2. To develop basic skills of using tools for word processing, presentation and database management.
- 3. To appreciate use of IT in various domains.

Specific:

- 1. Cognitive domain: Knowledge and understanding
 - To develop basic understanding of IT system operations and information accessing tools.
- 2. Psychonomotor domain: Skills
 - To develop skills in using tools of word processor, to manage database, to make graphs, to analyse report using spreadsheets and to develop web pages.
- 3. Affective domain: Personality traits
 - To develop habit of teamwork and structured presentation.

DESIGN OF QUESTION PAPER FOUNDATION OF INFORMATION TECHNOLOGY

Weightage to different forms of questions:

Sl.no.	Forms of questions	Mark for each question	No. of questions	Total marks
1.	MCQ	1	10	10
2.	SA-I	2	11	22
3.	LA-I	3	6	18
4.	LA-II	5	5	20
	Total		32	70

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1.	Easy	25	18
2.	Average	60	42
3.	Difficult	15	10
	Total	100	70

The expected length of answer and time to be taken under different forms of questions shall be as follows:

Sl.no.	Forms of questions	Expected time for each	Total expected time
		question	
1.	MCQ	2 minutes	20 minutes
2.	SA-I	4 minutes	44 minutes
3.	LA-I	8.5 minutes	51 minutes
4.	LA-II	10 minutes	50 minutes
5.	Reading of Question Paper & Revision	-	15 minutes
		Total time	180 minutes

CLASS-IX FOUNDATION OF INFORMATION TECHNOLOGY

Unit-	Wise weightage Time: 3 hours		M	larks : 70
Uni	Unit		M	
			Theory	Practical
I	IT basic		15	0
II	IT Tools			
	Windows			
	Ms office or Open office.org		50	20
	 Word or Other word processor 			
	 Excel or Other Spreadsheet program. 			
	• PowerPoint or Other Presentation Program			
III	Societal Impact of IT		5	0
IV	IT Application		0	10
		Total:	70	30

PART – A: EXTERNAL (THEORY)

70 Marks/180 Periods

Unit I: Basic of Information Technology

15 Marks

(a) Convergence of Technologies:

Computer system: Contents to be added:

Definition of computer system, Platform, Number of CPU cores, clock speed, Fault Tolerance, characteristics Of computer, Basic application of Computer, Components of computer system-Central Processing Unit(CPU), Visual Display Unit, Keyboard.

Concept of Memory: Primary and Secondary memory, RAM and ROM, Units of Memory- byte, kilobyte, Megabyte, gigabyte, Terabyte.

Input/ Output devices: Mouse, joysticks, Scanner, microphone, OCR, MICR, Light Pen, Bar code reader, digital camera, Printer, speaker, Plotter.

Storage Devices:

Hard Disk, CD-ROM, DVD, Pen/Flash Drive, Memory Sticks;

Types of software: System software, application softwarery (General purpose application software-word processing, spreadsheet, presentation, dbms management, specific purpose application software- accounting management, reservation system, HR Management, Attendence system, payroll system, invent control system, billing system) and Utility software (Disk/Folders/Files management, virus scanner/Cleaner, Encryption/Decryption tools).

Unit-II: Information Processing Tools

50 Marks

Operating System:

Basic concept of OS,Operating system,Needs for an operating system, Function of an OS(Processor mgmnt, Memory mgmnt, device mgmnt), types of an operating system(Gui based), Real time and distributed, commonly used operating system, UNIX,LINUX,Windows, Solaris, Boss(Bharat operating system solutions), Mobile OS-Android, Symbion.

Introduction to Windows: Basic component of GUI window: Desktop, frame, Title bar, Menu Bar, Status Bar, Scroll Bars(horizontal and vertical), Basic Operations of left and right buttons of mouse, Creating shortcut, Basic tools: Text Editor, Painting tool, Calculator, Using mouse and moving icons on the screen, My computer, Recycle bin, Control panel and function of control panel(Need to be added) ,Task bar, start-menu and menu selection, running an application, setting system date and time; windows explorer to view files,concept of folders and directories; creating /moving /renaming /deleting files and folder; opening and closing of windows; Minimize, restore and maximize forms of windows.

Office tools:

<u>Word-Processing Tools</u> (Example:-Ms-word, Open-Office or Libra Office, Google Docs Word Processor, Neo Office, AbiWord)

Introduction to word-processor, create and save a document, Editing and formatting a document; Text style(B, I,U) and font type, size, changing color, alignment of text, formatting paragraphs with line and paragraph spacing; adding Headers and footers, numbering pages; using grammar and spell-check utilities, using subscript and superscript; inserting symbols, inserting mathematical symbols(need to be added); print preview, printing a document.

Inserting WordArt, clipart and pictures, Page setting, bullets and numbering, border and shading, format painter, find and replace, inserting tables: Inserting, deleting row and columns, merging cells, splitting cells, using auto-format; mail merge.

<u>Introduction of Presentation Tools</u> (Example: Ms-powerPoint, Powton, SlideRocket, Google Docs Presentation Program)

Introduction to presentation graphics, understanding of concept of slide shows, basic elements of a slide, different types of slide layout, creating and saving a presentation, different views of slide- normal view, slide sorter view and slide sort; Editing and formatting a slide, Adding titles, subtitles, Text Background, watermark; Headers and footers, Numbering slides;

Inserting pictures from files, animating pictures and text with sound effects, timing text box, pictures and slides, Rehearse timings, ungrouping and grouping pictures from clipart.

<u>Introduction To Spreadsheet Tools</u> (Example: - Ms-Excel, Google Docs Spreadsheet, Kingsoft Spreadsheet)

Introduction to spreadsheet, concept of worksheets and workbooks, creating and saving a worksheet, working with a spreadsheet, entering numbers, text, date/time, series of using AutoFill, Editing and formatting a worksheet including changing color, size, font, alignment of text, inserting and deleting cells and rows and columns, formulae entering, entering a formula in a cell, using operators(+,-,*,/) in formulae, Relative referencing, absolute referencing and mixed referencing, printing a worksheet.

Use simple statical function: SUM(), AVERAGE(), MAX(), MIN(), IF(), (without compound statements); inserting tables in worksheet, embedding charts of various types: Line, pie, scatter, bar and area in a worksheet.

Unit-III:Societal Impact of IT:

5 Marks

Social issue of IT, Plagiarism, Intellectual property Rights, Copyright, Software Piracy, Data Security, Data Integrity, Carriers in Computing.

Note:

Teachers are requested to demonstrate some other popular software for word processing, presentation, and spreadsheet which support hindi and / or some other indian language(s).

(Leap office is an example of office suite (word processor with an interface to MS-office, lotus smartsuite, pagemaker, corel draw) with complete support of indian language)

Unit -IV: IT Application:

Students are suggested to work on the following areas using MS-Word, Ms-Powerpoint and Ms-Excel on topics implementing the tools covered in the course.

Domains:

PART – B: INTERNAL – Practical

(A) Hands- on experience (4 Exercises)

Design of a practical question paper

Instruction on the basis of syllabus, distribution of marks and conduct of practical examination have been provided. The examiner is advised to set the question paper according to the prescribed syllabus and distribution of marks.

(i) Windows operating system

2 marks

Marks: 30

(ii) Word Processor

6 marks

(iii) Presentation

6 marks

(iv) Spreadsheet

6 marks

1. Windows operating system: *

To test some of the following basic system operation on file/ folder(s):-

Create, rename, copy/cut/paste, delete, commands related to text editor/ drawing tools.

2. Word Processing tools: *(Example:-Ms-word, Open-Office or Libra Office,Google Docs Word Processor,Neo Office, AbiWord)

A document is required to be created for testing the following areas:

- Editting and formatting text and paragraph.
- Page and Paragraph setup.
- Inserting Symbols and pictures
- Mail Merge Formal/ Informal Letter.

•

3. Presentation Tools:* (Example: Ms-powerPoint, Powton, SlideRocket, Google Docs Presentation Program)

- School presentation
- Environment (save energy)and pollution(Global Warming)
- Product advertisment
- Science and social science topics from the course
- Trends in wireless computing.

4. Spreadsheet :* (Example: - Ms-Excel, Google Docs Spreadsheet,Kingsoft Spreadsheet)

- Formatting cells and data.
- function and formula (Relative, absolute and Mixed reference),
- charts.

*Printout of the document should be attached with the anwer sheet

(B) IT Application Report File:

5 marks

Students are requested to maintain an IT application report file containing assignments performed during academic year. Real life assignments/ presentation are to be done using word processing tool on 4 topics:

- Report Making
- Poster Making,
- Invitation Cards,
- Letter/ Application Writing

Presentation and Spreadsheet Tools:

- 4 presentation
- 4 spreadsheets with charts

(C)VIVA VOCE: 5 marks

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbook:

Foundation of Information Technology Class IX - Pearson Education Nancy Sehgal 482 F.I.E. Patparganj, Delhi – 110092

<u>CLASS-X</u> FOUNDATION OF INFORMATION TECHNOLOGY

Unit-Wise weightage

Part 'A' External Time: 3 hours		Marks: 70		
Unit	t		M	arks
			Theory	Practical
I.	IT basic		15	05
II.	IT Tools			
	Ms office or Open office.org Datab	ase software		
	*Ms Access(or any other Dbms sof	tware, Ex-sql,oracle,mysql)	50	15
	*HTML			
III.	IT Application		0	10
IV.	*Societal Impact of IT		5	0
		Total:	70	30

PART-A: EXTERNAL (Theory)

70 Marks/180 Periods

Unit I: Basic Of Information Technology.

15 marks / 20 periods

Internet: World Wide Web, Web Servers, Websites, Web Pages, Web Browsers, Blogs, Newsgroup, HTML, Web Address, Email address, URL, HTTP, Intranet.

Service available on Internet: Information retrieval, Locating sites using search engine and finding people on the net, Locating sites using search engines and finding people on the net.

Web Service:

Chat, E-mail, Video conferencing, FTP, Downloading and Uploading files from or to remote site, Newsgroup, E-learning, E-Banking, E-shopping, E-Reservation, E-groups, Social Networking.

Communication Technology.

Computer Networking: LAN, MAN, WAN, Internet, Interspace

Wired Networking Technology; Examples Co-axial cable, Ethernet cable, optical fiber

Wireless Networking technology; Examples- Bluetooth, Infrared and Wifi

Content Technology.

Data, Information and Multimedia (Pictures/Image, Audio, video, Animation)

Unit II: Information Processing Tools.

50 marks/ 40 periods

Office Tools Or Open Office Tools

Database Management software

Ms Access or any other DBMS software (Example- sql, oracle, my sql)

Basic concepts and need for a database, Creating a database, data types-Text, Number, date, time. Setting the Primary Key, Entering data into a database, Inserting and deleting fields, Inserting and deleting records, Data validation: Field Size, Default Value, Validation rule, Validation text, Required, Allow zero length, Creating Query using design view only single Tab.

Information Representation Methods:

HYPER TEXT MARKUP LANGUAGE

Introduction to web page designing using HTML, Creating and saving an HTML document, Accesing a web page using web browser(Internet Explorer, Netscape Navigator, Firefox, Opera, Apple, Safari, Google Chrome)

Elements in HTML:

Elements in HTML, Container and Empty elements, Designing web pages using the following elements:

HTML, HEAD, TITLES ,BODY(Attributes: BACKGROUND, BGCOLOR,TEXT, LINK, ALINK, VLINK, LEFTMARGIN, TOPMARGIN), FONT (Attributes: color, size, face), BASEFONT(Attributes: color, size, face), CENTER. BR(Break), HR(Horizontal Rule, Attributes: size, width, align, noshade, color), COMMENTS, <!--- > comments, H1, H6 (Heading), P(Paragraph), B(Bold), I(italics), U(underline), UL & OL(Unordered List & Item), Insertation of Image using the Ordered List Attributes: TYPE, START,LI(List elements IMG (Attributes: SRC, WIDTH, HEIGHT, ALT, ALIGN) Internal and External linking between web pages: Signficance of linking, A- anchor elements (Attributes: NAME, HREF, TITLE, ALT), Table tag (Attributes: tr,td,cellpadding, cellspacing, colspan, rowspan, border), introduction of Frame tag(Attributes: src), Introduction to Audio tab, **Introduction to video tag,** Html form and Inputs.

Unit III: IT Applications.

20 periods

Students are suggested to work on the following areas using Dbms software(like Ms-Access or Other) and HTML on topics implementing the tools covered in the course.

Unit IV: Societal Impact of IT.

5 marks / 5 periods

Unethical IT practices, Antivirus, How to Prevent Virus, Trojen Horse, Spam, Worms, SpyWare, Hackers And Crackers with regards to computer data and application, Data backup and Recovery tools and methods, Types of Backup, Information security provision in ecommerce.

Domains:

Business computing

- Personal data record file
- School / class result record
- Employee Payroll
- Stock Inventory
- Vehicle parking record file

Webpage Design

- My home page
- My School
- My Family

PART-B: INTERNAL (Practicals)

(A) Hands- on experience

1. Business computing problems: *

5 marks

Marks: 30

A business computing problem is required to be solved using Database Management Tool (Open Office or Ms-office) for testing the following aspects of database.

Creating and entering data into a database

- Setting the primary key
- Insering a meaningful data and organising
- Creating query with the same design view of the table

2. Web page designing: *

15 marks

A web page designing for testing in the following:

- Adding a title to web page.
- Formatting text
- Adding ordered / unordered list
- Wrtiting text in Paragraphs

The students are supposed to know the tools and style for designing domain specific web pages from real life application and the topic mentioned in the syllabus.

*printout of the table content / web page should be attached with the answer sheet.

(B) IT APPLICATION REPORT FILE:

5 marks

The students are supposed to make an IT application Report file containing real life assignment using a database management tool and HTML on topics from the domain.

Must have Printout of the following:-

- 4 Database solutions from Business computing
- 4 HTML source code along with the browser view.

(C) VIVA VOICE: 5 marks.

Oral question can be asked from any portions of the syllabus covered during class 9 and class 10.

Prescribed textbook:

Foundation of Information Technology Class X - Pearson Education
Nancy Sehgal 482 F.I.E. Patparganj,
Delhi – 110092

MUSIC

Objectives:

- To create interest in music generally and to inculcate in the students an appreciation of our own native music and to introduce several types of Ethnic musical instruments.
- To introduce the basic fundamentals of Western classical music. Keys, major, minor and chromatic forms are introduced as well as intervals basic chords, dynamics, tempo markings and principles of singing styles.
- To provide opportunity for the students to demonstrate practically what has been learned in theory.
- To develop and encourage musical curiosity and music writing skills.

DESIGN OF QUESTION PAPER MUSIC

Weightage to different forms of questions:

Sl.no.	Forms of	Mark for each	No. of questions	Total marks
	questions	question		
1.	MCQ	1	10 (3E, 7W)	10
2.	SA-I	2	12 (1E, 11W)	24
3.	SA-II	3	7 (7W)	21
4.	LA	5	3(1E, 2W)	15
	Total		32	70

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1.	Easy	25	18
2.	Average	60	42
3.	Difficult	15	10
	Total	100	70

The expected length of answer and time to be taken under different forms of questions shall be as follows:

Sl.no.	Forms of questions	Expected time for each question	Total expected time
1.	MCQ	2 minutes	20 minutes
2.	SA-I	4 minutes	48 minutes
3.	SA-II	8 minutes	56 minutes
4.	LA-II	14 minutes	42 minutes
5.	Reading of Question Paper & Revision	-	14 minutes
		Total time	180 minutes

CLASS - IX MUSIC (THEORY)

Unit-Wise weightage

Part 'A	' External	Time: 3 hours	Marks : 70
Unit			Marks
I.	Ethnic music		10
II.	Western music		60
		Total	70
Part '	B' Internal		30
		Grand total	100

PART – A: EXTERNAL

70 Marks/180 Periods

Unit-I Ethnic Music

10 marks

- 1. Name and explain Naga song genres (generic): Nursery Rhymes, Lullabies, Feast or Festival songs, Story songs, War songs, Love songs, Labour or Work songs, Lament (Funerary songs).
- 2. Identify the intervals of a given Naga folk song- whether skip, step or repetition.

Unit-II Western Music

60 marks

- 1. The Stave, Treble and Bass Clef, Bar (measure), Bar lines, Note, Note values, Rests, Time signatures.
- 2. Grouping notes and grouping rests, Beaming quavers, syncopation, ties.
- 3. Tones and semi-tones (half and whole step): Intervals; Accidentals
- 4. Circle of 5ths, Key signatures; Working out of the key of a piece.
- 5. Scales (major/minor): Relative minor, Natural minor, Harmonic minor, Labelling scales.
- 6. Triads, Arpeggios (broken chord), first inversion.
- 7. Ostinato, sequences.
- 8. Answering a given rhythm (melodic response); Writing own tunes to a given rhythm (melodic response).
- 9. Transposing tunes up or down an octave.
- 10. Analysis including Musical words and symbols

PART – B: Internal Marks : 30

Ethnic Music

- 1. National Anthem (sing the National anthem of India)
- 2. Sing one folk song from the student's own tribe/region
- 3. Sing any one other folk song taken from the book

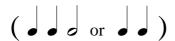
Western Music

A. Sightsinging:

- 1. Sing any one of these songs by memory with word: Doxology, God Bless My Nagaland, Amazing Grace.
- 2. Learn any one of these songs with tonic solfa syllables from staff notation Doxology, Ode to Joy (Joyful, Joyful, We Adore Thee), We wish you a Merry Christmas.
- 3. Sing half and whole steps above/below a given pitch

- 4. Sing the major scale up/down with syllables
- 5. Two pitch patterns ascending/descending
 - i) Up: drd rmr mfm fsf etc. using one of these rhythms:

Down: $d t_1 d t_1 l_1 t_1 = l_1 s_1 l_1$ etc. using one of these rhythms:



ii) Up: drmrd rmfmr mfsfm etc. using these rhythms:-

Down: $d t_1 l_1 t_1 d = t_1 l_1 s_1 l_1 t_1 = l_1 s_1 f_1 s_1 l_1$ etc. using these rhythms:



B. Rhythm Recitation: rhythms alone, or from songs, using these note values only:



and these rests

C. Ear Training:

- 1. Identify a major scale.
- 2. Identify half and whole steps (tone and semi-tone) played on an instrument.
- 3. Identify whether two played notes are a step up or down, a skip up or down, or the same (repetition)
- 4. Identify a melodic passage as either Legato or Staccato.
- 5. Conduct a simple 3/4 or 4/4 or 6/8 pattern to a passage played.

The allotment of marks shall be as follows:

Practical exercises
 Assignment
 5

5

3. Formal testing

N.B: It is expected that students are assessed on continuous and comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any bias.

Prescribed textbook:

Music Textbook IX (Theory & Practical) - Publication of NBSE, Kohima.

<u>CLASS - X</u> MUSIC (THEORY)

Unit-Wise weightage

Part 'A' External		Time: 3 hours	Marks : 70	
Unit			Marks	
I.	Ethnic music		10	
II.	Western music		60	
		Total	70	
Part 'B' Internal - Practical			30	

Grand Total

100 70 Marks/180 Periods

PART-A: EXTERNAL: Unit-I Ethnic Music

10 marks

- 1. Know the basic structure of the following instruments: Single String/Cup violin, Bamboo mouth organ, Flute, Trumpet, Drum, Log Drum, Bamboo sounding box, Leaf music.
- 2. Identify and name ethnic Naga music instruments.
- 3. Identify the melodic intervals of a given Naga folk song (4 measures)

Unit-II Western Music

60 marks

- 1. New notes for Grade 3, Treble Clef and Bass Clef, Note values and Rests.
- 2. Compound time signatures; Grouping notes in 6/8, 9/8 and 12/8. Grouping rests in 6/8, 9/8 and 12/8.
- 3. Writing your own tunes to a given rhythm.
- 4. Anacrusis
- 5. Quaver triplets, Grouping quaver triplet rests.
- 6. The melodic minor scale, the circle of 5ths, more about the new keys for Grade 3, Labelling scales.
- 7. Second inversions of tonic triads, Arpeggios (Broken Chords).
- 8. Working out the key of a piece.
- 9. Intervals major and minor 6ths and 7ths.
- 10. Real and tonal sequences.
- 11. Dominant triads in major keys; Dominant triads in minor keys; chord progression
- 12. Similar motion, Contrary motion.
- 13. Writing a Bass line; Writing a tune.
- 14. 4-part chords.
- 15. Transposing tunes up or down an octave
- 16. Analysis including Perfect cadences, Musical words and symbols

PART-B: Internal Marks : 30

Ethnic Music

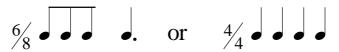
- 1. Sing 1 folk song from the students own tribe/ region.
- 2. Sing 1 folk song from another tribe

Western Music

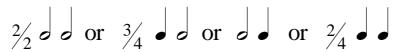
- A. Singing
- 1. Learn any one of these songs with tonic solfa syllables from staff notation: Auld Lang Syne, Drink to me only with thine eyes, Fairest Lord Jesus, Holy Holy, Great is thy Faithfulness.
- 2. Sing one stanza from one of these songs by memory with words, using correct singing style principles:

Drink....eyes; O Come, All Ye Faithful; 'Tis so sweet, Holy Holy.

- 3. Sing all the intervals up and down from 'Do' in the major scale.
- 4. Sing the major scale ascending with syllables, from RE, SOL, LA.
- 5. Sing two pitch patterns ascending only:
 - i) d m r d r f m r m s f m f l s f etc. in these rhythms:

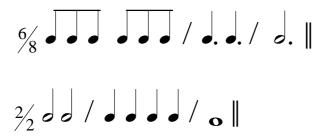


ii) d m r f m s f l s t l d t r do. Use any one of these rhythms:



B. Aural Awareness

i) Conduct or beat time to a melodic passage in the new time signatures



ii) Sight Singing: Sing very easy songs (melody only) at sight, in the Keys of C, F and G, using syllables. Mostly stepwise motion, perhaps a few 3rds.

Using only these note values: • • • • •

(in 2/4, 3/4, 4/4 time only)

- iii) Ear training:
- a) Recognizing any major intervals played
- b) Identify perfect and imperfect cadence.
- c) Identify a chord played as either Minor or Major.

The allotment of marks shall be as follows:

Practical exercises
 Assignment
 Formal testing
 marks
 marks

N.B.: It is expected that students are assessed on Continuous Comprehensive basis on the given topics. The role of teachers assumes a very significant part, as such, they are expected to be fair and assess the performance of the students without any basis.

Prescribed textbook:

Music Textbook X (Theory & Practical) - Publication of NBSE, Kohima.

Physical & Health and Work & Art Education for Classes IX & X

Sl.No	Unit	Lesson/Chapter	Content	Activity
I.	Physical Education	1.Games and Sports	 Meaning of physical education Importance of Athletics and other major sports The value of discipline, punctuality, respect for others, observance of the rules and fair play Being cooperative and developing team spirit Components of Physical and Health Education and their role in the wholesome growth and development of personality. 	Games and Sports
		2. Common Games and Sports 3. Scouting/ Guiding	 Examples of some common games and sports played in Nagaland- giving dimensions/area and basic rules Cricket, Football, Badminton, Track events, Martial Arts (Taekwondo) etc. Importance Values Role in the wholesome growth and 	Camps
II.	Health Education	4. Adventure5. Personal health	development of personality. - Importance - Values - Role in the wholesome growth and development of personality - Definition of Health - Personal Health - Four aspects of Health: Physical, Mental, Social, Moral - Factors affecting Health	Hiking/Cycling etc Case Studies
		6. Growth And Development	 Definition Characteristics Body and its functions: Human Body (basic) and its functions 	Case Studies
		7. Nutrition	 What is nutrition Factors shaping up the nutritional status of an individual Balanced Diet: what it is? 	

		8. Substance Abuse	What is substance abuse?Harmful effects of - alcohol, tobacco, drugsPreventive measures	Awareness programmes
		9. Diseases	 Definition Communicable And Non-communicable diseases Categories of diseases with examples, symptoms and prevention STD's- causes, symptoms and prevention HIV/AIDS- cause, symptoms and prevention 	Awareness programmes
		10. First-aid	- Meaning and definition - First-aid box- what it is - components of a simple first-aid box - First-aid during- bleeding - burn / fire wounds -fractures - CPR	Perform mock first-aid for different situations
III.	Adolescence Education	11.Adolescence and Pubescence	DefinitionVarious stages of a person's lifeImportanceRole of parents, teachers, society	Group Discussions
		12. Physical changes during early teens	General characteristicsPatterns of physical growthWhat controls the physical growth?Physical changes.	
		13. Behavioral changes during adolescence	 - How do physical changes affect behavior/ attitude - Emotional changes - Mental changes - Personal goals or interests developed during adolescence - Social and mental interests 	Case Studies
IV.	Work Education	14. Gardening	 Self sufficiency Different types of gardening What to grow? chart of vegetable-sowing season preparing nursery bed, seed bed and soil management, irrigation Some techniques of using space 	Do-it-yourself kitchen garden Visit a garden and report

		15. Craft	 -Toys and doll making- with activity, steps and materials required - Paper craft - Tailoring, embroidery - Bamboo craft- bamboo mug, c.d rack, soap case 	Craft making
		16. Community service	- Meaning- Types- Social work- Cleanliness drives	Cleanliness drives, Observation of important environment programmes
		17. Disaster Management	 What is disaster? Types and nature of disasters Natural: Earthquakes/Cyclones/Floods/ Droughts/Landslides Man-made: Fires/Traffic accidents/ drowning accidents/Gas leaks 	Mock-drills For earthquake and fire
V.	Art Education	18. Music	- Different musical instruments i.Ethnic ii.Western - Naga ethnic musical instruments i. single srting/cup violin ii. Bamboo mouth organ iii. Flute iv. Trumpet v. Drum vi. Log drum vii. Bamboo sound box viii. Leaf music - Vocal- i. accurate inner hearing ii. good singing posture iii. correct breathing technique iv. good vowel and consonant sounds - Scope and future prospects of music industry	Music compositions Music competitions
		19. Art	- Different art types - Drawing – method - Material required - Painting -method - Material required - Scope and future prospects of art industry	Art competitions
		20. Dance	Different types of dance formsScope and future prospects of dance industry	Dance competitions

VI.	Civic Sense	21. Civic life	- Meaning of civic sense - Civic life - in the family - at the school - in the society	Case studies
		22. Care of Public Property23. Road safety	 - Meaning of public property - Importance of public property - Meaning - Dos and don'ts - Road signs 	Group Discussions
VII.	Career Guidance	24.Career guidance	What is career?Different career optionsChoosing the right subject/subject combination/vocation	Career guidance seminars/ career clinics

Lesson – wise distribution

Unit	Lessons for Class IX	Lessons for Class X
I	1 & 3	2 & 4
II	5 – 7	8 – 10
III	11 & 12	13
IV	14 & 16	15 & 17
V 18		19 & 20
VI 21		22 & 23
VII	24	

Prescribed textbook:

Life skills for Secondary - Headword Publishing Company Pvt. Ltd. B-40, Sector 57, Noida, UP - 201301