

ENGLISH
CLASS - IX

DISTRIBUTION OF MARKS

	Out of 80	Internal Marks
(i) Prose	25	
(ii) Poetry	15	
(iii) Rapid Reader	10	
(iv) Grammar & Composition	30	
Total Marks	80	20

ACTIVITIES FOR INTERNAL ASSESSMENT

1. Excursions: To a nearby place of interest, such as museums, zoos, institutions for the differently abled, etc. and to write a brief report.
2. Role Playing: Mock Interview of any characters from the lessons prescribed.
3. Review on Books/Movies: On any topic e.g. wars, differently abled persons, sports personalities, patriots etc.
4. Compose poems on any topic.

MARKING FOR INTERNAL ASSESSMENT

Listening Skills	5
Speaking Skills	5
Writing Skills	5
Miscellaneous Skills	5
Total	20 Marks

I. PROSE

Pieces to be read:

1. A Drive in the Motor Car – *Roald Dahl*
2. My Big Brother – *Premchand*
3. A Tiger for Malgudi – *R. K. Narayan*
4. The Yellow Face – *Sir Arthur Conan Doyle*
5. Bees – *Reginald Gamble*
6. The Beggar and the King – *Winthrop Parkhurst*

II. POETRY

Pieces to be read:

1. The Tide Rises, the Tide Falls – *Henry Wadsworth Longfellow*
2. Nicholas Nye – *Walter De La Mare*
3. Ode to Autumn – *John Keats*
4. The Power of Music – *Sukumar Ray*
5. The Yarn of the 'Nancy Bell' – *W. S. Gilbert*

III. RAPID READER

- **Adventures of Tom Sawyer**

IV. GRAMMAR & COMPOSITION

Contents:

1. Subject – Verb Concord
2. Reported Speech
3. Transformation of Sentences (Easy Transformation)
 - i) Sentences with adverb ‘too’
 - ii) Interchange of degrees of comparison
 - iii) Interchange of affirmative and negative
 - iv) Interrogative into assertive and vice versa
 - v) Interchange of exclamatory and assertive sentences
4. Phrasal Idioms
5. Notice Writing
6. Newspaper report
7. Editing – Errors; Omissions; Short paragraphs
8. Comprehension
9. Essay/Letter Writing

PRESCRIBED TEXTBOOKS:

1. Prose & Poetry

- **Reading Circle - IX**

M/S Oxford University Press, Pragjyotish Apartment (1st Floor),
M. Tayabullah Road, Dighali Pukhuri (East), Guwahati – 781001.

2. Rapid Reader

- **Adventures of Tom Sawyer**

M/S Macmillan India Ltd., S. C. Goswami Road, Pan Bazar,
Guwahati – 781001.

3. Grammar & Composition

- **Functional English Grammar & Composition**

M/S Laxmi Publications Pvt. Ltd., Hemsan Complex, M. D. Shah, Paltan
Bazar, Guwahati – 781008.

ADDITIONAL ENGLISH **CLASS - IX**

DISTRIBUTION OF MARKS

	Out of 80	Internal Marks
(i) Prose	22	
(ii) Poetry	16	
(iii) Play	15	
(iv) Composition	19	
(v) Essay	08	
Total Marks	80	20

MARKING FOR INTERNAL ASSESSMENT

(i) Listening and Reading: Eg. Audio clips, newspaper reading, poetry reading and review, vocabulary (spelling and pronunciation).	5 marks
(ii) Writing: Eg. Story or picture composition, reports, dialogue writing, autobiography, biography, note making, diary writing, argumentative essays.	10 marks
(iii) Creative Activities/ Assignments: Eg. Advertisements, Quotable quotes, Mock Interview, Slogan Writing, Book review, poster designing, extempore speech, debate, enacting plays, designing greeting cards, public speaking, autograph book, self composed songs or poems.	5 marks

I. PROSE

Pieces to be read:

1. The Liar – *Mulk Raj Anand*
2. The Night the Bed Fell – *James Thurber*
3. Jenny – *Victor Hugo*
4. The Umbrella Man – *Roald Dahl*
5. Self-made Men – *Stephen Leacock*

II. POETRY

Pieces to be read:

1. Our Casuarina Tree – *Toru Dutt*
2. From Auguries of Innocence – *William Blake*
3. Strange Meeting – *Wilfred Owen*
4. The Forsaken Merman – *Mathew Arnold*
5. A Satirical Elegy on the Death of a Late Famous General – *Jonathan Swift*

III. PLAY

- **The Tempest**

IV. COMPOSITION

Contents:

1. One Word Substitution
2. Amplification
3. Substance Writing
4. Paraphrasing
5. Advertisement
6. Picture Composition

PRESCRIBED TEXTBOOKS:

1. Prose

- **A Miscellany of Short Stories**
M/S Inter University Press Pvt. Ltd., Educational Publishers, 30/7, Shakti Nagar, New Delhi - 110007.

2. Poetry

- **Wings of Poesy**
M/S Evergreen Publications, 4779/23, Ansari Road, Darya Ganj, New Delhi - 110002.

3. Play

- **The Tempest**
M/s Macmillan India Ltd., S. C. Goswami Road, Pan Bazar, Guwahati - 781001.

4. Composition

- **Holy Faith Essential English Grammar & Composition**
M/s Holy Faith International (P) Ltd., Hem Baruah Road, Pan Bazar, Guwahati - 781001.

ASSAMESE (MIL)
CLASS - IX

DISTRIBUTION OF MARKS

Prose	20
Poetry	15
Rapid Reader	15
Grammar	10
Composition	10
Essay	10
Total Marks	80

MARKING FOR INTERNAL ASSESSMENT

1. Activities a. Extempore speech/prepared speech b. A Report on a few Harvest Festivals observed in Meghalaya c. Write-up on experience of a journey d. Critical review of any poem from the prescribed lesson	10 marks
2. Prepared Speech: (From Textbook)	5 marks
3. Recitation of Poem: Poem should be selected from the textbook.	5 marks
Total	20 marks

I. PROSE

Pieces to be read:

- Anyar prati byabohar – *Satya Nath Borah*
- Mukti – *Lakkhi Nath Bezbarua*
- Samay – *Nilmoni Phukan*
- Bharatar baichitra majot aikya – *Dr. Hemanta Kr. Sharma*

II. POETRY

Pieces to be read:

- Sisuleela – *Srimanta Sankardeb*
- Manab Bandana – *Chandra Kumar Agarwala*
- Prachanda dhulumai Prasna Korile mok – *Dr. Bhupen Hazarika*
- Mor des – *Hiren Bhattacharya*

III. RAPID READER

- **Mur Saisab, Mur Kaisor by Bhobendra Nath Saikia**

IV. GRAMMAR

Pieces to be read:

Sandhi

Karok

Nattwa Bidhi, Shattwa Bidhi

Pad Prakaran

Nama Dhatu

Samasa (Danda Samasa, Tatpurus Samasa, Karmadharay Samasa)

V. COMPOSITION

Pieces to be read:

1. Make sentences with Phrases and Idioms
2. Opposite words
3. One word for a group of words
4. Similar words, having different meanings
5. Amplification
6. Letter writing

VI. ESSAY WRITING

Types of Essay:

Adarsha Mulak

Bhraman Mulak

Jibani Mulak

Barnana Mulak

PRESCRIBED TEXTBOOK:

1. Prose and Poetry

- **Sahitya Subah for Class IX & X**
- SEBA.

2. Composition

- a) Rachana Bichitra – *D. S. Deka*
- b) Prabeshika Rachana Shiksha – *G. Sharma*
- c) Assamiya Rachna Shiksha – *Dr. L. Gogoi, Dr. N. Sharma*

3. Grammar

- *Adhunik Assamiya Bhaskar Vyakaran by G. Sharma*
- Assam State Textbook Production & Publication.*

BENGALI (MIL)
CLASS - IX

DISTRIBUTION OF MARKS

Prose	16
Poetry	12
Rapid Reader	12
Grammar	24
Composition	16
Total Marks	80

MARKING FOR INTERNAL ASSESSMENT

1. A Project work or assignment	10 marks
2. A viva voce on the home assignment submitted	5 marks
3. A viva voce on any assigned topic	5 marks
Total	20 marks

I. PROSE

Pieces to be read:

1. Pitrisneha – by *Dwijendralal Roy*
2. Chhuti – by *Rabindranath Tagore*
3. Jagroto Devota – by *Banaphool*

II. POETRY

Pieces to be read:

1. Dhulamandir – by *Rabindranath Tagore*
2. Kabar – by *Jasimuddin*
3. Manasa Mangal – by *Shaktipada Brahmachari*

III. RAPID READER

- **Ramer Sumati** by *Sharatchandra Chottopadhyay*

IV. GRAMMAR

Pieces to be read:

1. Shabdo Bandar
2. Uposarga o Anusarga
3. Samas o tar chhoyti prokar bhed
4. Ek kothay prokash
5. Baagdhara
6. Ashuddhi Sansodhan

V. COMPOSITION

Pieces to be read:

1. Bhaab Samprasaron
2. Prabandho Rachana

PRESCRIBED TEXTBOOKS:

1. **Sahitya Sourav – IX**
- M/S Assam State Textbook Production & Publication Corporation Ltd.,
Guwahati.
2. **Bani Bichitra** (Class VIII – XII) by *Piyush Dey*

GARO (MIL)
CLASS - IX

DISTRIBUTION OF MARKS

Prose	25
Poetry	18
Rapid Reader	10
Grammar	10
Composition	7
Essay/Comprehension	10
Total Marks	80

MARKING FOR INTERNAL ASSESSMENT

Writing skills: story writing, picture composition, Life of the poet or author	10 marks
Listening & Reading: Reading, Spelling & Dictations, Phonetics	5 marks
Creativity: Extempore, slogan writing, chart making base on the lesson, Group discussions	5 marks
Total	20 marks

I. PROSE

Pieces to be read:

1. Capt. Williamson A. Sangma – *Mary Celina A. Sangma*
2. Ta-sek Wari – *John P. Marak*
3. A-chikrangni Kal-susaanirang – *Tharsush K. Sangma*
4. Lindrid D. Shirani Janggi Tangani – *Venibabe N. Sangma*
5. A-chikrangni Ganding Chinding aro Gipin Patanirang – *Llewellyn R. Marak*

II. POETRY

Pieces to be read:

1. A-chik A-song – *Harendra W. Marak*
2. A-gilsak Dal-begipa Alda Nok – *Jarongpang Rongmuthu*
3. Nokgipani Pattia – *Phoebe W. Momin*
4. A-songtangna Sintea – *Surendra S. Marak*
5. Somo aro Kam – *Bemfield K. Sangma*

III. RAPID READER

- **Veniceni Badinggipa by Mackenson Rongmuthu**

IV. GRAMMAR & COMPOSITION

Pieces to be read:

Sentence aro uni bakrang

1. Sentence
2. Subject aro Predicate
3. Noun, Pronoun, Verb
4. Subject Noun, Predicate Verb aro Object
5. Talatgipa Kattarang – Adjective, Adverb
6. Preposition, Conjunction aro Interjection
7. Sentenceni Ma-arang

Bak – III

Kattarang (Ma-arang aro Bimungrang)

1. Kattarangni Ma-arang
2. Noun: Ma-arang, Person, Number, Gender aro Case
3. Sentenceo Casarangni Kam
4. Pronoun - Ma-arang, Person, Number, Gender aro Case

Bak – IV

Punctuation aro Punctuation Ka-ani Niamrang

Recommended Textbook:

- **A chik Grammar – E. G. Philips**

V. A·CHIK COMPOSITION

- **A·chik Composition – K. M. Momin**

PRESCRIBED TEXTBOOKS:

1. **Prose & Poetry**
 - **Poraiani Ki tap IX**
 - Tura Book Room, Tura, Meghalaya.

HINDI (MIL)
CLASS - IX

DISTRIBUTION OF MARKS

Prose	20 marks
Poetry	20 marks
Rapid Reader	15 marks
Grammar	17 marks
Composition (a) Essay	08 marks
Total	80 marks

MARKING FOR INTERNAL ASSESSMENT

1. Home assignment (Life history of any writer) in own handwriting	07 marks
2. Dictation	04 marks
3. Reading	04 marks
4. Spelling	05 marks
Total	20 marks

I. PROSE

Pieces to be read:

1. Mantra-Tantra – by Hajari Prasad Dwebedi
2. Pashchatap – by Premchand
3. Dr. Bhim Rao Ambedkar – by Niranjan Kr. Singh
4. Kitna Badla Mera Gaon – by Mansingh Verma
5. Jeeta Kaun – by Satyaprakash Agarwal “Umang”
6. Ganitagya Jyotishi Aryabhata – by Gunakar Mule

II. POETRY

Pieces to be read:

1. Hamen Sirjan Ki Shakti Dena – by Mansingh Verma
2. Dekho Kitni Pyari Maa – by Ram Gopal Bharatiya
3. Jhansi Ki Rani – by Ramdhari Singh Dinkar
4. Doha-Ekadas – by Kabir Rahim
5. Muktee Ki Aakansha – by Sarveshwar Dayal Saxena

III. RAPID READER

- Sanchayan (NCERT) Part-I

IV. GRAMMAR & COMPOSITION

Pieces to be read:

1. Varna-Vichar
2. Vartani
3. Sandhi-Swar Sandhiya
4. Sabdo Ke Bhed
5. Padh Vichar Aur Un Palo Ke Bhed (A)
6. Ling Aur Bachan
7. Karak Aur Ruprachana
8. Samas (A)
9. Upasarga; Pratyay
10. Sabdh Rachana
11. Vakya, Upvakya Aur Unke Bhed
12. Vakya-Parivartan
13. Viramchinha
14. Lokoktiya

Composition

1. Patra Lekhan (letter-writing)
2. Nibandh Lekhan (essay) (Hamare Gaon – Sainik Ki Atma Katha)

PRESCRIBED TEXTBOOKS:

1. ***Deepshika Hindi – Class IX***
– M/S Arya Publishing Company, 1002-1003, Faiz Road, Karol Bagh, New Delhi – 110005.
2. ***Bhasha Vyakaran IX & X***
– M/S Neeta Prakashan, A-4, Ring Road, South Extension-1, New Delhi – 110049.
3. (i) ***Learn Hindi – Learn Khasi*** (Dictionary)
(ii) ***Learn Hindi – Learn Garo*** (Dictionary)
– M/S Gewali Publication, Upper Mawprem, Shillong – 2.
4. Rapid Reader – Sanchayan (NCERT) Part-I.

KHASI (MIL)
CLASS - IX

DISTRIBUTION OF MARKS

Prose	24 marks
Poetry	14 marks
Rapid Reader	14 marks
Grammar & Composition	28 marks
Total	80 marks

MARKING FOR INTERNAL ASSESSMENT

1. Poetry- Text- Ka Duitara Ksiar - <i>U Soso Tham</i> Recitation Individual, poetry writing.	6 marks
2. Prose-Text- (i) Ki Dienjat Jong Ki Longshuwa – <i>Fr. J. Bacchiarello</i> (ii) Ki Phawer U Aesop - <i>Soso Tham</i> (iii) Ki Jingsneng Tymmen-Part I - <i>Radhon Sing Berry</i> Poster Designing, Story writing, Extempore, Elocution, Study Tour, Social Activities on any related topics, One act play.	10 marks
3. Rapid Reader – Text- Na Mihngi Sepngi - <i>Fr. H Elias</i> Take photographs related to topics, Study Tour, Designing Greeting Cards on related topics.	2 marks
4. Grammar And Composition- Text- Hints On The Study Of Khasi Language - <i>D. Nissor Sing Wahlang</i> Paste collection of pictures depicting the different kinds of Pronoun.	2 marks
N.B.: <i>Scrap book on any activities done and cover will add to the weightage of marks.</i>	
TOTAL	20 marks

I. PROSE

Pieces to be read:

1. Ka Jingiasiatthong
2. Ka Mei Ramew Bad Ki Laiphew Jingthaw
3. Ki Samla Bad Ki Drok

II. POETRY

Pieces to be read:

1. U Khlur
2. Ki Khun Ka Mariang
3. Ki Saw Aiom
4. U Lok Shisha

III. KI PHAWER U AESOP

Lynnong: 31-40

IV. KI JINGSNENG TYMMEN (PART-I)

V. RAPID READER

Pieces to be read:

1. Ka Jingrep Slasha
2. Ka Unibersiti Barim Ka Ri India
3. Ka Jingsngewtynnad Ka Jingpulekot

VI. GRAMMAR, COMPOSITION & ESSAY

1. The Pronouns
 - a. The Personal Pronoun
 - b. The Reflexive Pronoun
 - c. The Relative Pronoun
The Compound Relative Pronoun
 - d. The Interrogative Pronoun
 - e. The Demonstrative Pronoun
 - f. The Indefinite Pronoun
 - g. The Distributive PronounSyntactical Rules on the Pronouns of Different persons
2. Adverbs and words with which they are used.
From Alphabet 'A' to 'L' – Page 70 to 76
3. Essay
4. Precis Writing

PRESCRIBED TEXTBOOKS:

1. **Prose**
 - Ki Dienjat Jong Ki Longshuwa – J. Bacchiarello
 - Ki Phawer U Aesop – Soso Tham
 - Ki Jingsneng Tymmen (Part-I) – Radhon Sing Berry
2. **Poetry**
 - Ka Duitara Ksiar – Soso Tham
3. **Rapid Reader**
 - Na Mihngi Sepngi – H. Elias
4. **Grammar & Composition**
 - Hints on the Study of Khasi Language – Ri Khasi Publication, Mawkhar, Shillong – 793001.

MIZO (MIL)
CLASS - IX

DISTRIBUTION OF MARKS

Hla (Poetry)	20 marks
Thu (Prose)	25 marks
Mizo Grammar	15 marks
Lemchan (Drama)	10 marks
Thawnthu tawi (Rapid Reader)	10 marks
Total	80 marks

MARKING FOR INTERNAL ASSESSMENT

1. Writing skill - Project work, home assignment, composition, amplification, story writing.	10 marks
2. Listening and Reading skill - Dictation, Recitation, News reading, extempore debating.	10 marks
Total	20 marks

I. THU (PROSE)

Pieces to be read:

1. A lem leh a tak - *Vanneihtluanga*
2. Mihring dikna leh chanvo - *Lalhmunmawia*
3. Tlawmngaihna leh aia upa zah - *R. Lalrawna*
4. Huaina - *R. H. Rokunga*
5. Rilru puitling - *H. Ngurthansanga*
6. Incheina - *P. L. Liandinga*
7. Mahni inhneh - *Lalzuia Colney*
8. Sumdawnna - *Lalrochuanga Pachuau*
9. Chhiatni thatni - *Thanpuii pa*
10. Nungchate leh zofate - *B. Lalthangliana*
11. Lungawina - *James Dokhuma*

II. HLA (POETRY)

Pieces to be read:

1. A saw raltiang tlangah - *Lalmama*
2. Hrinhnian an liamna thlafam khua chu e - *Saihnuna*
3. Ka pian ka seilenna ram - *Rokunga*
4. Kan zoram nuam - *Hranghnuna*
5. Lam ang ka lo let leh ta e - *F. Rokima*
6. Min then lul suh - *Lalzova*
7. Buannel - *R. L. Thanmawia*
8. Sem sem dam dam - *B. Bawlkhumma*
9. Luah loh run - *Zirsangzela Hnamte*

10. Hmangaih lenrual dar ang – *Damhauhva*

III. MIZO GRAMMAR

1. Noun
2. Pronoun
3. Chhinchhiahna (Punctuation)
4. Mizo tawng ziah dan (Ziah zawm tur chi te)
5. Tawng Upa

IV. LEMCHAN (DRAMA)

Lungrem a chim – *Liansailova*

V. THAWNTHU TAWI (RAPID READER)

Pathian Samsuih – *Rev. Zokima*

PRESCRIBED TEXTBOOK:

- **Mizo (Pawl Kaw Zirlai Bu) – MBSE Publication**

NEPALI (MIL)
CLASS - IX

DISTRIBUTION OF MARKS

Prose	30 marks
Poetry	18 marks
Rapid Reader	10 marks
Grammar & Composition	22 marks
Total	80 marks

MARKING FOR INTERNAL ASSESSMENT

1. Reading Recitation, Dictation, Extempore speech, Elocution	05 marks
2. Home assignment - self composed poem or to write the life story of any poet or author	10 marks
3. Project Work - a) To develop the story from the given picture (visual clue) b) Slogan writing c) Chart making on the basis of Lessons (Paste Pictures and Drawings)	05 marks
Total	20 marks

I. PROSE

Pieces to be read:

1. Bhavishya Nirman
2. Nisha
3. Kartavya
4. Upahaar
5. Hargovind Khurana
6. Gandhi.

II. POETRY

Pieces to be read:

1. Timi Ujyalo Parkhirahu
2. Aama
3. Jeevan: Ek Drishti
4. Shraddhanjali
5. Kaviprati
6. Mrityu: Kamana Kehi Mera

III. RAPID READER

- 'Mane' by Subhash Darjeeling

IV. GRAMMAR & COMPOSITION

Pieces to be read:

Part I Descriptive Grammar

1. Essay Writing (Nibandha Lekhan)
2. Letter Writing (Patra Lekhan)
3. Paragraph Writing (Anuchhed Lekhan)
4. Comprehension (Bodh Pranali)
5. Amplification (Vistritikaran)
6. Precis Writing (Saransa Lekhan or Sanchhepikaran)

Part II Objective Grammar - 15 marks

1. Linga, Sangya, Sarvanam, Sandhi, Visheshan
2. Kriya, Kaal, Dhatu Ra Pratyay, Vachya
3. Ukhan, Tukka Ra Vakhyansha
4. Viparitarthak Shabda, Sammocharit Shabda, Prayayvachi Shabda, Sar Shabda (one word for many), Chinha Prayog (Punctuation)

PRESCRIBED TEXTBOOKS:

1. Prose & Poetry:

- **Madhyamik Nepali Sahitya Bhag V**
edited by Dr. Tek Narayan Upadhaya

2. Rapid Reader

- 'Mane' by Subhash, Darjeeling

3. Grammar & Composition

- (i) **Madhyamik Nepali Vyakaran Ra Rachana**
Written & Compiled By the Expert Academicians
Published by Shri Raaj Prakashan, Darjeeling

OR

- (ii) **Vyakaran Saurabh (Chautho Bhaag) (PART - IV)**
Written by Vishnu Sharma Adhikari
Published by Puspa Prakashan, Siliguri.

URDU (MIL)
CLASS - IX

DISTRIBUTION OF MARKS

Prose	25 marks
Poetry	15 marks
Grammar	15 marks
Composition	
(a) Essay	10 marks
(b) Letter/Application/ Paragraph Writing	10 marks
(c) Substance Writing	05 marks
Total	80 marks

MARKING FOR INTERNAL ASSESSMENT

1. Reading/Recitation: Reading or reciting passages or verses in Urdu from seen or unseen prose or poetry.	04 marks
2. Writing: Writing paragraphs or verses in Urdu on the topics related to literature or science or environment.	04 marks
3. Comprehension: Understanding passages or verses in Urdu from seen or unseen prose or poetry.	04 marks
4. Life-Sketch: Representing a brief Life-Sketch of authors or poets in Urdu on a chart paper whose writings are included in the academic syllabus.	04 marks
5. Extempore Speech/Group Discussion: A short extempore speech or Group discussion on the topics related to literature or science or environment in Urdu.	04 marks
Total	20 marks

I. PROSE

Pieces to be read:

- a. Guzra Hua Zamana – Sir Syed Ahmed Khan.
- b. Haj-E-Akbar – Munshi Premchand.
- c. Magar Woh Tut Gai – Saleha Aabid Hussian.
- d. Dehat Ki Zindagi – Abdul Halim Sharar.
- e. Jeene ka Saliqua – Khuwaja gulam-Us-Sayadeen.
- f. Information Technology – Adara

II. POETRY

Pieces to be read:

- a. Muflassi Sab Bahar Khoti Hai – Wali Mohammad Wali
- b. Ashk Aankhon Mein Kab Nahin Aata – Mir Taqui Mir.
- c. Dard Mannat Kish Dawa Na Hua – Mirza Ghalib.

- d. Hum Hein Mataye Koocha-O-Bazar – *Majrooh sultan Puri*.
- e. Taalim Se Be Tawajahi Ka Nateeja – *Altaf Hassain Haali*.
- f. Ek Arzoo – *Mohammad Iqbal*.
- g. Dawat-e-Inqalab – *Wahiduddin Salim*
- h. Arzoo, Shab-e-pur Bahar – *Akhatar Ansari*.
- i. Dastan Shahzade ke Gayeb Hone Ki – *Mir Hasan*.

III. GRAMMAR & COMPOSITION

Pieces to be read:

- a. Reading /Recitation
- b. Words vocabulary
- c. Objective type questions from each lesson. (Refer Text book)
(Fill in the blanks/True and False Statement/Choose the correct answer/Matching the column)
- d. Paragraph writing on selected topics such as computer, madri jaban urdu, Hamdardi, Baron ka Ehtaram, Majhab-E-Islam
- e. Kind of Nazm
- f. Substance writing
- g. Grammar and compositions
 - (i) Huroof and kinds of huroof
 - (ii) Zamana ki kismein
 - (iii) Synonyms (Muta radif Alfaz)
 - (iv) Antonyms (Mutazad Alfaz)
 - (v) Opposite numbers and genders
 - (vi) Idioms and phrases
 - (vii) Ism Zarf
 - (viii) Letter writing/ Application writing/ Essay writing

IV. PROJECT WORK (Any two of the following topics may be selected)

- (i) Tourism and Tourists spots in our State
- (ii) Natural Disaster
- (iii) Biography of some prominent Urdu Writer and Poet
- (iv) Air and Water Pollution

PREScribed TEXTBOOKS:

1. **Prose & Poetry**
- **Naway Urdu for Class IX (NCERT)**
2. **Grammar & Composition**
- **Urdu Grammar Book by NCERT**

MATHEMATICS
CLASS - IX

DISTRIBUTION OF MARKS

1.	Number System	08 marks
2.	Algebra	20 marks
3.	Co-ordinate Geometry	06 marks
4.	Geometry and Construction	20 marks
5.	Mensuration	16 marks
6.	Statistics and Probability	10 marks
	Total	80 marks

WEIGHTAGE OF MARKS FOR INTERNAL ASSESSMENT

The Internal Assessment of 20 marks is to be awarded on the basis of the performance of a student in the activity work, project work and continuous assessment as per the following scheme.

- Assessment through test – 10 marks
- Assessment of Project Work – 5 marks
- Assessment of 2 skills – 5 marks.

For its effective implementation, the following aspects of the scheme should be kept in view:

- a. Internal examination is to be conducted at the school level to assess the activity work and project work done by every student during the year.
- b. Each student must perform at least two activities for assessment of any two skills like numerical ability, observation, ability to see patterns, analytical thinking, understanding logic, skills of comparing, interpreting, problem solving, decision making and skills of games.
- c. The assessment may be carried out by a team of two Mathematics teachers including the teacher teaching the particular class

The break-up of 5 marks for assessment of **activity/skills** could be as:-

- | | | | |
|---|--|---|---------|
| - | Statement of the objective of activity | - | 01 mark |
| - | Design of approach to activity | - | 01 mark |
| - | Actual conduct of activity | - | 01 mark |
| - | Procedure explanation | - | 01 mark |
| - | Result and conclusion | - | 01 mark |

The marks for assessment of two activities (5 + 5) may be added and the average should be calculated out of 5.

The breakup of 5 marks for assessment of **project** could be as:-

-	Identification and statement of the project	-	01 mark
-	Design of the project	-	01 mark
-	Procedure adopted	-	01 mark
-	Write-up of the project	-	01 mark
-	Interpretation of the result	-	01 mark

UNIT I : NUMBER SYSTEMS

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

Existence of $\sqrt[n]{x}$ for a given positive real number x and its representation on the number line with geometric proof. Definition of n^{th} root of a real number. Recall of laws of exponents with integral powers. Rational exponents with positive real bases (to be done by particular cases, allowing learner to arrive at the general laws). Rationalization (with precise meaning) of real numbers of the type $\frac{1}{a + b\sqrt{x}}$ and $\frac{1}{\sqrt{x} + \sqrt{y}}$ (and their combinations) where x and y are natural numbers and a, b are integers.

UNIT II : ALGEBRA

1. Polynomials

Definition of a polynomial in one variable, its coefficients, with examples and counter examples, its terms, zero polynomial. Degree of a polynomial; constant, linear, quadratic, cubic polynomials; monomials, binomials, trinomials. Factors and multiples. Zeros 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 $ax^2 + bx + c$, $a \neq 0$ where a, b, c are real numbers and of cubic polynomials using the Factor Theorem.

Recall of algebraic expressions and identities. Further identities of the type $(x + y + z)^2 = x^2 + y^2 + z^2 + 2xy + 2yz + 2zx$; $(x \pm y)^3 = x^3 \pm y^3 \pm 3xy(x \pm y)$, $x^3 + y^3 + z^3 - 3xyz = (x + y + z)(x^2 + y^2 + z^2 - xy - yz - zx)$ and their use in factorization of polynomials.

2. Linear Equations In Two Variables

Recall of linear equations in one variable. Introduction to equations in two variables. Focus on linear equations of the type $ax + by + c = 0$. 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. Graph of

linear equations in two variables. Examples, problems from real life, including, problems on Ratio and Proportion and with algebraic and graphical solutions being done simultaneously.

UNIT III : COORDINATE GEOMETRY

Coordinate Geometry

The Cartesian plane, coordinates of a point, names and terms associated with the coordinate plane, notations, plotting points in the plane.

UNIT IV : GEOMETRY

1. Lines And Angles

- i) (Motivate) If a ray stands on a line, then the sum of the two adjacent angles so formed is 180° and the converse.
- ii) (Prove) If two lines intersect, the vertically opposite angles are equal.
- iii) (Motivate) Results on corresponding angles, alternate angles, interior angles when a transversal intersects two parallel lines.
- iv) (Motivate) Lines, which are parallel to a given line, are parallel.
- v) (Prove) The sum of the angles of a triangle is 180° .
- vi) (Motivate) If a side of a triangle is produced, the exterior angle so formed is equal to the sum of the two interiors opposite angles.

2. Triangles

- i) (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).
- ii) (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).
- iii) (Motivate) Two triangles are congruent if the three sides of one triangle are equal to three sides of the other triangle (SSS Congruence).
- iv) (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 (RHS Congruence).
- v) (Prove) The angles opposite to equal sides of a triangle are equal.
- vi) (Motivate) The sides opposite to equal angles of a triangle are equal.
- vii) (Motivate) Triangle inequalities and relation between 'angle and facing side' inequalities in triangles.

3. Quadrilaterals

- i) (Prove) The diagonal divides a parallelogram into two congruent triangles.
- ii) (Motivate) In a parallelogram, opposite sides are equal and conversely.
- iii) (Motivate) In a parallelogram, opposite angles are equal and conversely.
- iv) (Motivate) A quadrilateral is a parallelogram if a pair of its opposite sides is parallel and equal.

- v) (Motivate) In a parallelogram, the diagonals bisect each other and conversely.
- vi) (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.

4. Area

Review concepts of area. Recall area of a triangle.

- i) (Prove) Parallelograms on the same base and between the same parallels have the same area.
- ii) (Motivate) Triangles on the same base and between the same parallels are equal in area.

5. Circles

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

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

6. Constructions

- i) Construction of bisectors of line segments. Construction of angles of 60° , 90° , 45° angles etc, equilateral triangles.
- ii) Construction of a triangle given its base, sum/difference of the other two sides and one base angle.
- iii) Construction of a triangle with a given perimeter and base angles.

UNIT V : MENSURATION

1. Areas

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

2. Surface Areas And Volumes

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

UNIT VI : STATISTICS & PROBABILITY

1. Statistics

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

2. Probability

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).

PRESCRIBED TEXTBOOK:

- **Modern's abc of Mathematics - IX**
M/S Modern Publishers Chancellor Commercial, H. B. Road,
Panbazar, Guwahati - 781001.

SCIENCE & TECHNOLOGY
CLASS - IX

DISTRIBUTION OF MARKS

Physics	26 marks
Chemistry	26 marks
Biology	28 marks
Total	80 marks

PHYSICS

1. MOTION

□ Introduction □ How to Describe the Motion of a Body □ Scalar and Vector Quantities □ Meaning of the Terms Distance and Displacement □ Uniform and Non-Uniform Motion □ Speed [Measuring Rate of Change of Motion] □ Velocity [Speed with Direction] □ Acceleration □ Equations of Uniformly Accelerated Motion □ Distance-Time Graphs □ Velocity-Time Graphs □ To Prove Graphically □ Uniform Circular Motion □ Differences between Circular Motion and Linear Motion

2. FORCE

□ Introduction □ Force in Our Life □ Effects of Force □ Balanced and Unbalanced Forces □ Newton's Laws of Motion □ Newton's First Law of Motion □ Inertia □ Momentum □ Newton's Second Law of Motion □ Units of Force □ Applications of Newton's Second Law or Impulse of Force □ Newton's Third Law of Motion □ Law of Conservation of Momentum

3. GRAVITATION

□ Introduction □ Gravitation □ Newton's Universal Law of Gravitation □ Motion of Falling Objects □ Force of Gravity □ Mass and Weight □ Equations of Motion for Freely Falling Bodies □ Thrust and Pressure □ Upthrust or Buoyant Force □ Floating and Sinking □ Archimedes' Principle □ Density □ Relative Density

4. WORK AND ENERGY

□ Introduction □ Work □ Mathematical Expression for Work □ Mathematical Expression for Work Against Acceleration Due to Gravity □ Unit of Work □ Positive, Negative and Zero Work □ Energy □ Units of Energy □ Mechanical Energy □ Potential Energy □ Mathematical Expression for Potential Energy □ Kinetic Energy □ Mathematical Expression for Kinetic Energy □ Law of Conservation of Energy and Energy Transformations □ Law of Conservation of Energy □ A Theoretical Example to Illustrate the Law of Conservation of Energy □ Examples of Transformation of Energy □ Power □ Unit of Power □ Commercial Units of Energy

5. SOUND

□ Introduction □ Sound is Produced by Vibrating Bodies □ Propagation of Sound □ Common Terms Associated with Wave Motion □ Characteristics of Sound □ Speed of Sound in Different Media □ Reflection of Sound □ Human Ear

CHEMISTRY

1. THE MATTER IN OUR SURROUNDINGS

□ Introduction □ Particulate Nature of Matter □ Theory of Molecular Structure of Matter or Characteristics of Particulate Nature of Matter □ Physical Classification of Matter □ States of Matter □ Inter-Conversion of States of Matter □ Evaporation

2. IS MATTER AROUND US PURE?

□ Introduction □ Pure Substances □ Mixtures □ Solutions □ Saturated and Unsaturated Solutions □ Suspensions □ Colloidal Solutions or Colloids □ Separating the Components of a Mixture □ Physical and Chemical Changes □ Elements □ Compounds

3. ATOMS AND MOLECULES

□ Atomic Theory of Matter □ Atom □ Molecule □ Molecular Formula □ How to Write Chemical Formula from the Knowledge of Valency □ Molecular Mass and Formula Unit Mass □ Mass Percentage Composition of an Element in a Compound □ Mole

4. STRUCTURE OF ATOM

□ Introduction □ Electrical Nature of Matter □ History of Discovery of Modern Structure of Atom □ Thomson's Atomic Model □ Discovery of Nucleus □ Assumption and Discovery of Neutron □ Bohr's Model of Atom □ Study of Nucleus □ Study of Extra-Nuclear Electrons □ Geometric Representation of Atomic Structure of the First 20 Elements □ Valency □ Isotopes □ Isobars

BIOLOGY

1. CELL - THE FUNDAMENTAL UNIT OF LIFE

□ Cell □ Discovery of the Cell □ Unicellular and Multicellular Organisms □ Cell-shape and Size □ Cell Structure (Structural Organisation of a Cell) □ Cell Organelles □ Diffusion and Osmosis □ Endocytosis □ Exocytosis

2. TISSUES

□ Introduction □ Plant Tissues □ Animal Tissues

3. DIVERSITY IN LIVING ORGANISMS

□ Classification □ Classification and Evolution □ Nomenclature □ Classification of Organisms □ Kingdom Animalia

4. WHY DO WE FALL ILL?

□ Health □ Disease □ Types of Diseases □ Manifestations of Disease □ Acute and Chronic Diseases □ Causes of Diseases □ Transmission of Diseases – Means of Spread □ Principles of Treatment □ Principles of Prevention

5. NATURAL RESOURCES

□ Natural Resources □ Types of Natural Resources □ Air : The Breath of Life □ Water : A Wonder Liquid □ Soil □ Biogeochemical Cycles

6. IMPROVEMENT IN FOOD RESOURCES

□ Development of Agriculture □ Crop Production □ Crop Variety Improvement – Higher Yield Through Genetic Manipulation □ Animal Husbandry □ Poultry Farming □ Fish Farming □ Bee Keeping

PRACTICAL

Total – 20 marks

Every student will perform at least fifteen experiments (at least five experiments from each unit) during the academic year.

PHYSICS

1. To determine the density of a solid (denser than water) by using a spring balance and a measuring cylinder.
2. To study the variation in time period of a simple pendulum with length and to plot L - T graph.
3. To determine the value of acceleration due to gravity by simple pendulum.
4. To verify Archimedes' Principle.
5. To determine the boiling point of water and melting point of Ice.
6. To measure the temperature of hot water as it cools and plot a temperature-time graph.
7. To determine the velocity of a pulse propagated through a stretched string/slinky.

BIOLOGY

1. To study the main parts of compound microscope.
2. To make a temporary stained mount of onion peel under a microscope.
3. To study major groups of plants (Thallophyta, Bryophyta, Pteridophyta, Gymnosperms and Angiosperms) and their salient features.
4. Study of major groups of animals (non-chordates and chordates) and their salient features.
5. To study the life cycle of mosquito.
6. Collect articles in the local newspaper regarding health information.

CHEMISTRY

1. To prepare a solution of common salt/sugar of a given percentage composition of mass.
2. 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.
3. To differentiate between a mixture (containing two components) and pure compounds.
 4. To carry out the following chemical reactions and record the observations
 - (i) Iron nail with copper sulphate solution in water.
 - (ii) Zinc with sulphuric acid.
 - (iii) sodium sulphate with barium chloride in the form of their aqueous solutions.
 5. To distinguish between saturated and un-saturated organic compounds.
 6. To prepare carbon dioxide gas and study its two physical and two chemical properties.
 7. To study the sublimation of iodine or camphor or NH_4Cl or Naphthalene.
 8. To study the interconversion of three different states of water and to show that they are the three states of the same substance.
 9. To separate the constituents of mixture of two substances (anyone):
 - (i) Iron and sand
 - (ii) Iodine and sand
 - (iii) Sand and salt or sugar
 - (iv) Salt and water
 - (v) Sugar and water
 10. To prepare one homogeneous and one heterogeneous mixture (preferably one liquid) and distinguish them on the basis of atleast one common property of such solution like
 - (i) Colour
 - (ii) Filtration
 - (iii) Settling

PRESCRIBED TEXTBOOKS:

1. **Core Science – IX**
- M/S Goyal Brothers Prakashan, D-231-232, Sector-63, Noida – 201301 (UP).
2. **Practical Science – IX**
- M/S Laxmi Publications Pvt. Ltd., Hemsan Complex, M. D. Shah Road, Paltan Bazar, Guwahati – 781008.

SOCIAL SCIENCE
CLASS - IX

THE SCHEME OF ASSESSMENT FOR THEORY EXAMINATION.

One Paper	Theory Examination = 80 marks	Pass marks = 24
	Internal Assessment = 20 marks	Pass marks = 6
	(for regular candidates)	

DISTRIBUTION OF MARKS

Unit	Parts/Sections	Theory
Section I	History	23
Section II	Civics	17
Section III	Economics	17
Section IV	Geography (Including map works and Disaster Management)	23
Total		80

WEIGHTAGE OF MARKS FOR INTERNAL ASSESSMENT

<i>Each subject segment carries the following weightage of marks for Internal Assessment:</i>	
i) History	5 marks
ii) Civics	5 marks
iii) Economics	5 marks
iv) Geography + Disaster Management	5 marks
Total	20 marks

These marks can be internally assessed through any one of the following:

- i. Project Work
- ii. Written Tests
- iii. Assignments (Class or Home Work)

Different types of Project Work:

- Class/Interclass discussions and debates
- Preparations of a report based on newspapers/magazines clippings
- Conducting a survey in the locality (activity to be accompanied by a brief report)
- Posters
- Mock drills to deal with fire mishaps, earthquakes, flood and landslides to be practiced for the topic, 'Disaster Management.'

SECTION I: HISTORY

Unit I: Events and Processes

1. The French Revolution (1789-1799)
2. Socialism in Europe and the Russian Revolution

Unit II: Livelihoods, Economies and Societies

3. Forest Society and Colonialism
4. Peasants and Farmers

Unit III: Freedom Fighters of Meghalaya

5. Freedom Fighters and Prominent Personalities of Meghalaya
 6. **Part I:** Investment
 - Part II:** Financial Sector Reforms and Insurance
 7. Source of Funds
- } only for classroom transaction and Internal Assessment.

SECTION II: GEOGRAPHY

1. Major Relief Features of the Earth
2. Tides and Ocean Currents
3. India – Size and Location
4. Physical Features of India
5. Drainage
6. Climate
7. Natural Vegetation and Wildlife
8. Natural Disasters
9. Survival Skills

SECTION III: CIVICS

1. Democracy in the Contemporary World
 2. Democracy in India
 3. Electoral Politics in India
 4. Institutions of Parliamentary Democracy
 5. Citizens' Rights in Democracy
 6. The Rights of Persons with Disabilities Act, 2016
 7. Swachh Bharat Abhiyan
 8. PAN Card and Aadhaar Card
 9. **Part I:** Grievance Redressal Mechanism in Insurance
 - Part II:** Credit Cards and Debit Cards
- } only for classroom transaction and Internal Assessment

SECTION IV: ECONOMICS

1. Factors of Production
 2. People as a Resource
 3. Poverty as a Challenge
 4. Food Security in India
 5. Demonetization of Currency
 6. **Part I:** RBI – Central Bank
- }

- | | | |
|----|--------------------------------|------------------------------------|
| | Part II: Budgeting | only for classroom transaction and |
| 7. | Part I: Banks and Loans | Internal Assessment |
| | Part II: Inflation | |

PRESCRIBED TEXTBOOKS:

Core Social Science - IX

- M/S Goyal Brothers Prakashan, D-231-232, Sector-63,
Noida - 201301 (UP)

Note: Schools may choose their own topics for Internal Assessment.

HEALTH & PHYSICAL EDUCATION
CLASS - IX

Theory	-	80 Marks
Internal Assessment	-	20 Marks
Total =		100 Marks

WEIGHTAGE OF MARKS FOR INTERNAL ASSESSMENT

The Internal Assessment will be done through tests, assignments and project work. The breakup of 20 marks for the Internal Assessment may be as follows:

Part - 1	-	Written tests	-	10 marks
Part - 2	-	Assignments	-	5 marks
Part - 3	-	Project Works	-	5 marks

The Internal Assessment of 20 marks is to be awarded on the basis of the performance of a student in the activity work, project work and assessment on the assignments given at the end of each lesson of the textbook.

The break-up of 5 marks for Assignments could be as:-

-	Statement of the skills/activity	-	01 mark
-	Elaboration of the skills/activity	-	01 mark
-	Procedure of explanation	-	01 mark
-	Actual conduct of activity	-	01 mark
-	Conclusion	-	01 mark

The marks for assessment of two activities (5+5) may be added and the average should be calculated out of 5

The break-up of 5 marks for assessment of project could be as:-

-	Identification and statement of the project	-	01 mark
-	Design of the project	-	01 mark
-	Procedure adopted	-	01 mark
-	Write-up of the project	-	01 mark
-	Interpretation of the result	-	01 mark

To implement them successfully, the following aspects of the scheme should be kept in view:-

- (a) Internal Examination is to be conducted at the school level to assess the activity and project work done by each student.

- (b) Each student is required to choose at least two activities during the year.
- (c) Assessment may be carried out by a team of two teachers including the teacher teaching this particular subject.

NOTE: Schools may choose their own topics for Internal Assessment.

Units to be read

Unit I Health Hazards of Modern Age

- 1. Health Hazards of Modern Age

Unit II Growth and Development

- 1. Nature and General Principles of Growth and Development
- 2. Characteristics of Boys and Girls during Adolescence

Unit III Food and Nutrition

- 1. Factors Affecting Nutritional Status of an Individual
- 2. Nutritional Status
- 3. Balanced Diet for Adolescent Boys and Girls
- 4. Malnutrition and its Effects

Unit IV Communicable Diseases

- 1. General Knowledge about Communicable Diseases and Diseases Spread through Air
- 2. Diseases Spread Through Water and Food
- 3. Diseases Spread Through Insects and Animals
- 4. Diseases Spread by Close Contacts and (spread) by Soil

Unit V Safety

- 1. Safety
- 2. First Aid
- 3. Care of the Sick at Home

PRESCRIBED TEXTBOOK:

- **Health (A Textbook for Secondary School Class IX)**
M/S Frank Brothers & Co. Ltd., 136, Moti Lal Nehru Road, Opp. Pan Bazar
Girls' Hr. Sec. School, Guwahati – 781001.

COMPUTER SCIENCE
CLASS - IX

DISTRIBUTION OF MARKS

Sl. No.	Chapter	Theory Mark	Practical Mark
1	Computer System	8	–
2	Computer Software	8	–
3	Operating System and Windows	10	4
4	Communication Technology	10	–
5	Content Technology	8	–
6	Programming in C	14	8
7	Visual Basic	14	8
8	Societal Impacts of IT - I	8	–
	Total Mark	80	20

PIECES TO BE READ:

1. **Computer System**
 - Characteristics of a computer
 - Functional components of a computer
 - Input unit
 - Central Processing Unit
 - Memory unit
 - Storage devices
 - Output unit
 - Types of computer
 - Applications of computer
2. **Computer Software**
 - Types of software
 - System software
 - Operating system
 - Language translators
 - Utilities
 - Application software
3. **Operating System and Windows**
 - Basic concepts of OS
 - Functions of OS
 - Popular Operating Systems
 - Basic Commands in Operating Systems
 - Desktop

- Windows Explorer
- Files and Folders
- Windows Accessories
- Paint
- Notepad
- WordPad
- Mobile operating system

4. **Communication Technology**

- Advantages of a Network
- Topology
- Linear Bus Topology
- Star Topology
- Ring Topology
- Tree Topology
- Types of Network
- Networking Technology
- Wired Technology
- Wireless Technology
- Internet
- World Wide Web

5. **Content Technology**

- Data
- Information Multimedia
- Animation
- File Types
- Conclusion

6. **Programming in C**

- Algorithm
- Flowchart
- Introduction to C
- Structure of a C program
- C Variable
- C Constant
- C Keyword
- Data types
- Declaring a Variable
- Input and Output Functions
- Operators
- Control Structures
- Loop Structures

7. **Visual Basic**

- Starting Visual Basic 6.0
- Components of Visual Basic Window
- Creating a New Project in Visual Basic
- Basic Controls involved in Building an Interface
- Creating a Simple Visual Basic Project
- Executing Visual Basic Program
- Saving a Project and a Form
- Data Types
- Operators in Visual Basic
- Built-in Functions in VB
- Control Statements
- Looping Statements

8. **Societal Impacts of IT – I**

- Plagiarism
- Intellectual Property Rights
- Privacy
- Computer Security and Integrity of Information
- Careers in IT

PRESCRIBED TEXTBOOK:

- **Click Start –**

Computer Science for Schools – 9

M/S Cambridge University Press, 10 Raja Subodh Mallick Square Second Floor, Kolkata – 700013.

ENVIRONMENTAL EDUCATION

CLASS - IX

PIECES TO BE READ:

UNIT I: UNDERSTANDING ECOSYSTEM

1. Ecosystem and its Types
2. Interaction Between Biotic and Abiotic Components
3. Energy Flow and Nutrient Cycle
4. Destruction of an Ecosystem
5. Impact of Ecosystem Destruction
6. Conservation of an Ecosystem
7. Role of Environmental Impact Assessment (EIA)

UNIT II: DEPLETION OF RESOURCES

1. Natural Resources
2. Depletion of Recourses
3. Practices for Conservation of Resources

UNIT III: WASTE GENERATION AND MANAGEMENT

1. Sources and Classification of Waste
2. Impact of Waste Accumulation
3. Need for Management of Waste
4. Waste Management

UNIT IV: ENVIRONMENTAL VALUES AND ETHICS

1. Fundamental Values and Ethics
2. Women and Child Welfare.

PRESCRIBED TEXTBOOK:

- **A Textbook of Environmental Education - IX**
M/S Goyal Brothers Prakashan, D-231-232, Sector-63, Noida - 201301 (UP).

Note: *Evaluation on subject Environmental Education shall be school based grading.*

CREATIVE EXPRESSION
CLASS - IX

- The whole book is to be completed -

PRESCRIBED TEXTBOOK:

- **WOW! ART & CRAFT - IX**
M/S Allied Publishers, 1/13-14, Asaf Ali Road, New Delhi - 110002.

Note: *Evaluation on subject Creative Expression shall be school based grading.*

WORK EDUCATION
CLASS - IX

PIECES TO BE READ:

1. Health and Hygiene
2. Prevention and Control of Diseases
3. Field Work: Awareness on Diseases
4. Community Service
5. Photography
6. Commercial Art
7. Interior Decoration
8. Dyeing and Printing
9. Book Keeping
10. Plumbing
11. Woodwork
12. Meal Planning
13. Designing and Stitching
14. Computer: Using MS Office

PRESCRIBED TEXTBOOK:

- **Work Education - IX**
M/S Allied Publishers, 1/13-14, Asaf Ali Road, New Delhi - 110002.

Note: *Evaluation on subject Work Education shall be school based grading.*

ENGLISH
CLASS - X

DISTRIBUTION OF MARKS

	Out of 80	Internal Marks
(i) Prose	25	
(ii) Poetry	15	
(iii) Rapid Reader	10	
(iv) Grammar & Composition	30	
Total Marks	80	20

ACTIVITIES FOR INTERNAL ASSESSMENT

1. Excursions: To a nearby place of interest, such as museums, zoos, institutions for the differently abled, etc. and to write a brief report.
2. Role Playing: Mock Interview of any characters from the lessons prescribed.
3. Review on Books/Movies: On any topic e.g. wars, differently abled persons, sports personalities, patriots etc.
4. Compose poems on any topic.

MARKING FOR INTERNAL ASSESSMENT

Listening Skills	5
Speaking Skills	5
Writing Skills	5
Miscellaneous Skills	5
Total	20 Marks

I. PROSE

Pieces to be read:

1. Powder and Arms – *R. L. Stevenson*
2. Great Expectations – *Charles Dickens*
3. Romeo and Juliet – *Charles and Mary Lamb*
4. The Demon with the Matted Hair – *Indian Folktale*
5. The Monkey's Paw – *W. W. Jacobs*
6. Fourteen – *Alice Gerstenberg*

II. POETRY

Pieces to be read:

1. Life – *Charlotte Bronte*
2. The Gift of India – *Sarojini Naidu*
3. The Solitary Reaper – *William Wordsworth*
4. Exiled – *Edna St. Vincent Millay*
5. The Village Schoolmaster – *Oliver Goldsmith*

III. RAPID READER

- **Oliver Twist**

IV. GRAMMAR & COMPOSITION

Contents:

1. Tenses
2. Active and Passive Voice
3. Reported Speech
4. The Preposition
5. Miscellaneous Idioms
6. Comprehension
7. Letter-Writing (Formal)/Essay
8. E-mail Writing
9. Article Writing
10. Story Writing

PRESCRIBED TEXTBOOKS:

1. Prose & Poetry

- **Reading Circle - X**

M/S Oxford University Press, Pragjyotish Apartment (1st Floor),
M. Tayabullah Road, Dighali Pukhuri (East), Guwahati – 781001.

2. Rapid Reader

- **Oliver Twist**

M/S Macmillan India Ltd., S. C. Goswami Road, Pan Bazar,
Guwahati – 781001.

3. Grammar & Composition

- **Functional English Grammar & Composition**

M/S Laxmi Publications Pvt. Ltd., Hemsan Complex, M. D. Shah, Paltan
Bazar, Guwahati – 781008.

ADDITIONAL ENGLISH
CLASS - X

DISTRIBUTION OF MARKS

	Out of 80	Internal Marks
(i) Prose	22	
(ii) Poetry	16	
(iii) Play	15	
(iv) Composition	19	
(v) Essay	08	
Total Marks	80	20

MARKING FOR INTERNAL ASSESSMENT

(i) Listening and Reading: Eg. Audio clips, newspaper reading, poetry reading and review, vocabulary (spelling and pronunciation).	5 marks
(ii) Writing: Eg. Story or picture composition, reports, dialogue writing, autobiography, biography, note making, diary writing, argumentative essays.	10 marks
(iii) Creative Activities/ Assignments: Eg. Advertisements, Quotable quotes, Mock Interview, Slogan Writing, Book review, poster designing, extempore speech, debate, enacting plays, designing greeting cards, public speaking, autograph book, self composed songs or poems.	5 marks

I. PROSE

Pieces to be read:

1. A High Drive – L. P. Hartley
2. War – Luigi Pirandello
3. Out of Business – R. K. Narayan
4. The Postmaster – R. Tagore
5. The Lady or the Tiger? – Frank R. Stockton

II. POETRY

Pieces to be read:

1. The Education of Nature – William Wordsworth
2. Swimmers – Louis Untermeyer
3. The Man with the Hoe – Edwin Markham
4. If – Rudyard Kipling
5. A River – A. K. Ramanujan

III. PLAY

- **A Midsummer Night's Dream (Macmillan)**

IV. COMPOSITION

Contents:

1. One Word Substitution
2. Amplification
3. Substance Writing
4. Paraphrasing from the Play
5. Advertisement
6. Picture Composition

PRESCRIBED TEXTBOOKS:

1. Prose

- **A Miscellany of Short Stories**
Published by Inter University Press Pvt. Ltd., Educational Publishers,
30/7, Shakti Nagar, New Delhi - 110007.

2. Poetry

- **Wings of Poesy**
M/S Evergreen Publications, 4779/23 Ansari Road, Darya Ganj,
New Delhi - 110002.

3. Play

- **A Midsummer Night's Dream**
M/s Macmillan India Ltd., S. C. Goswami Road, Pan Bazar,
Guwahati - 781001.

4. Composition

- **HolyFaith Essential English Grammar & Composition**
M/S Holy Faith International (P) Ltd., Hem Baruah Road, Pan Bazar,
Guwahati - 781001.

ASSAMESE (MIL)
CLASS - X

DISTRIBUTION OF MARKS

Prose	20
Poetry	15
Rapid Reader	15
Grammar	10
Composition	10
Essay	10
Total Marks	80

MARKING FOR INTERNAL ASSESSMENT

1. Activities: a. Extempore speech/prepared speech b. A Report on a few Harvest Festivals observed in Meghalaya c. Write-up on experience of a journey d. Critical review of any poem from the prescribed lesson	10 marks
2. Prepared Speech: (From Textbook)	5 marks
3. Recitation of Poem: Poem should be selected from the textbook.	5 marks
Total	20 marks

I. PROSE

Pieces to be read:

1. Chatra jibon aru smaj sewa – *Deinswar Neog*
2. Bharatiya Sanskriti – *Hem Baruah*
3. Asomor jonogosthir gathoni aru sanskriti – *Abdus Sattar*
4. Nuton arn saptados satikar bouddhik biplob – *Dr. Kulendu Pathak*

II. POETRY

Pieces to be read:

1. Bor geet – *Sri Sri Madhadev*
2. Zikir – *Ajain Fakir*
3. Mor desh manuhor desh – *Debakanta Baruah*
4. Drisyantor – *Harekrishna Deka*

III. RAPID READER

- **Mur Saisab, Mur Kaisor** by *Bhobendra Nath Saikia*

IV. GRAMMAR

Pieces to be read:

Sandhi

Nattwa Aru Shattwa Bidhi

Samasa (Digu Samasa, Bahubrihi Samasa, Abyaieebhab Samasa)

Pratyaya (Tadhit Pratyaya, Stri Pratyaya)

Pad Prakaran

Karak

V. COMPOSITION

Pieces to be read:

1. Make sentences with Phrases and Idioms
2. Opposite words
3. One word for a group of words
4. Similar words, having different meanings
5. Amplification
6. Letter writing

VI. ESSAY WRITING

Types of Essay:

Adarsha Mulak

Bhraman Mulak

Jibani Mulak

Barnana Mulak

PRESCRIBED TEXTBOOK:

1. Prose and Poetry

- **Sahitya Subah for Class IX & X**
- SEBA.

2. Composition

- a) Rachana Bichitra – *D. S. Deka*
- b) Prabeshika Rachana Shiksha – *G. Sharma*
- c) Assamiya Rachna Shiksha – *Dr. L. Gogoi, Dr. N. Sharma*

3. Grammar

- **Adhunik Assamiya Bhaskar Vyakaran** by *G. Sharma*
Assam State Textbook Production & Publication.

BENGALI (MIL)
CLASS - X

DISTRIBUTION OF MARKS

Prose	16
Poetry	12
Rapid Reader	12
Grammar	22
Composition	18
Total Marks	80

MARKING FOR INTERNAL ASSESSMENT

1. A Project work or assignment	10 marks
2. A viva voce on the home assignment submitted	5 marks
3. A viva voce on any assigned topic	5 marks
Total	20 marks

I. PROSE

Pieces to be read:

1. Guptadhan – by *Rabindranath Tagore*
2. Adorini – by *Prabathkumar Mukhopadhyay*
3. Tota Kahini – by *Sayad Mujtaba Ali*

II. POETRY

Pieces to be read:

1. Gramyachhabi – by *Girindramohini Dasi*
2. Abar Asibo Phire – by *Jiibananda Das*
3. Rabindranath – by *Achintyakumar Sen*

III. RAPID READER

- **Shrikanta O Indranath** by *Sharatchandra Chottopadhyay*

IV. GRAMMAR

Pieces to be read:

1. Definition – apinihiti, abhishruti, swaraagam, borno biparjay, samas
2. Samas o tar chhoyti prokar (samas nirnoy)
3. Bagdhara
4. Ek kothay prokash
5. Somochaarito bhinnarthak shobdo

V. COMPOSITION

Pieces to be read:

1. Comprehension
2. Prabandha Rachana or picture composition/story writing (for blind students)

PRESCRIBED TEXTBOOKS:

1. **Sahitya Sourav – X**
- M/S Assam State Textbook Production & Publication Corporation Ltd.,
Guwahati.
2. **Bani Bichitra** (Class VIII – XII) by *Piyush Dey*

GARO (MIL)
CLASS - X

DISTRIBUTION OF MARKS

Prose	25
Poetry	18
Rapid Reader	10
Grammar	10
Composition	7
Essay/Comprehension	10
Total Marks	80

MARKING FOR INTERNAL ASSESSMENT

Writing skills: story writing, picture composition, Life of the poet or author	10 marks
Listening & Reading: Reading, Spelling & Dictations, Phonetics	5 marks
Creativity: Extempore, slogan writing, chart making base on the lesson, Group discussions	5 marks
Total	20 marks

I. PROSE & POETRY

Pieces to be read:

1. Rev. Thangkan K. Sangma – *Lindrid D. Shira*
2. Jatni Nisan, Git aro Chin – *Brucellish K. Sangma*
3. Meghalayani Sam Bolrang aro Do-o Matrang – *T. T. C. Marak*
4. Sonaram R. Sangma – *Dr. Milton S. Sangma*
5. Chadambeni Salrang – *Lindrid D. Shira*

II. POETRY

Pieces to be read:

1. Ang' Chakki – *Evelyn R. Marak*
2. Saljong Tasin Me-chik – *Monensing R. Sangma*
3. Pring – *Surendra S. Marak*
4. Basako – *Jonmoni D. Shira*
5. Da-al – *Rev. Gilbert K. Marak*

III. RAPID READER

- Skul Master (Dakmesokani) – *L. D. Shira*

IV. GRAMMAR

Pieces to be read:

Bak - I

Phrase

Clause

Bak - III

1. Verb – Ma·arang, Predicateko Chu·sokatgiparang, Mood, Participle, Verbal Noun, Verbal Adjective aro Tense.
2. Adjective - Ma·arang aro Tosusaani
3. Adverb - Ma·arang aro Tosusaani, Napsikgipa Adverbrang

Recommended textbook:

- A·chik Grammar – *E. G. Phillips*

V. COMPOSITION

- i) A·chik Composition – *K. M. Momin*
- ii) A·chik Kattarang – *W. K. Sangma*

VI. ESSAY/COMPREHENSION

PRESCRIBED TEXTBOOKS:

1. Prose & Poetry

- **Poraiani Ki tap X**
 - Tura Book Room, Tura, Meghalaya.

HINDI (MIL)
CLASS - X

DISTRIBUTION OF MARKS

Prose	20 marks
Poetry	20 marks
Rapid Reader	15 marks
Grammar	17 marks
Composition (a) Essay	08 marks
Total	80 marks

MARKING FOR INTERNAL ASSESSMENT

1. Home assignment (Life history of any writer) in own handwriting	07 marks
2. Dictation	04 marks
3. Reading	04 marks
4. Spelling	05 marks
Total	20 marks

I. PROSE

Pieces to be read:

1. Shahid Bakri – *by Ayodhya Prasad Goyellia*
2. Bade Sapne Dekhe – *by A. P. J. Abdul Kalam*
3. Har Ki Jeet – *by Sudarshan*
4. Tiruwalluwar – *by Mansingh Verma*
5. Neelkanth – *by Mahadevi Varma*
6. Ped Ki Baat – *by Jagaddish Chandra Basu*

II. POETRY

Pieces to be read:

1. Is Matti Ko Naman Karen – *by Mansingh Verma*
2. Vishwa Nagrik Bane – *by Vidhichandra Patwari*
3. Teen Kundaliya – *by Giridhar*
4. Baal Leela – *by Surdas*
5. Uddyami Nar – *by Ramdhari Singh Dinkar*
6. Satpura Ke Ghane Jungle – *by Bhawani Prasad Mishra*

III. RAPID READER

- Sanchayan (NCERT) Part-II

IV. GRAMMAR & COMPOSITION

Pieces to be read:

1. Sandhiyan-Vyanjan, Visarga, Tatha Hindi Ki Sandhiyan
2. Padhvichar Aur Unpadho Ke Bhed (B)
3. Kriya Ka Roob Parivartan Kalo Aur Vidhiyomein
4. Kriya Ke Vachaya Aur Prayog
5. Samas (B)
6. Sabdh – Vivek
7. Padhbandhan
8. Vakya, Upvakaya Aur Unke Bhed
9. Vakya Parivartan
10. Vakya Visleshan
11. Muhabare
12. Lokoktiya
13. Alangkar

Composition

1. Nibandh Lekhan (essay)
Paropkar – Madhyapanduware Vinash (Avyasbhi)

PRESCRIBED TEXTBOOKS:

1. *Deepshika Hindi – Class X*
– M/S Arya Publishing Company, 1002-1003, Faiz Road, Karol Bagh, New Delhi – 110005.
2. *Bhasha Vyakaran IX & X*
– M/S Neeta Prakashan, A-4, Ring Road, South Extension-1, New Delhi – 110049.
3. (i) *Learn Hindi – Learn Khasi* (Dictionary)
(ii) *Learn Hindi – Learn Garo* (Dictionary)
– M/S Gewali Publication, Upper Mawprem, Shillong – 2.
4. Rapid Reader – Sanchayan (NCERT) Part-II.

KHASI (MIL)
CLASS - X

DISTRIBUTION OF MARKS

Prose	24 marks	
Poetry	14 marks	
Rapid Reader	14 marks	
Grammar & Composition	28 marks	
Total	80 marks	20 marks (Internal)

MARKING FOR INTERNAL ASSESSMENT

1. Poetry- Text- Ka Duitara Ksiar- <i>U Soso Tham</i> Recitation Individual, poetry writing.	6 marks
2. Prose-Text- (I) Ki Dienjat Jong Ki Longshuwa – <i>Fr. J. Bacchiarello</i> (ii) Ki Phawer U Aesop- <i>Soso Tham</i> (iii) Ki Jingsneng Tymmen-Part I- <i>Radhon Sing Berry</i> Poster Designing, Story writing, Extempore, Elocution, Study Tour, Social Activities on any related topics, One act play.	10 marks
3. Rapid Reader – Text- Na Mihngi Sepngi - <i>Fr. H Elias</i> Snap pictures related to topics, Study Tour, Designing Greeting Cards on related topics.	2 marks
4. Grammer And Composition- Text- Hints On The Study Of Khasi Language- <i>D. Nissor Sing Wahlang</i> Paste collection of pictures depicting the different kinds of Adverb.	2 marks
N.B.:- <i>Scrap book on any activities done and cover will add to the weightage of marks.</i>	
TOTAL	20 marks

I. PROSE

Pieces to be read:

1. Ka Dorbar U Khasi Hyndai
2. Ki Mawbynna, Mawniam Bad Ki Kor

II. POETRY

Pieces to be read:

1. U Dieng Bilat
2. Ki Sngi Ba La Leit Noh
3. Ka Mynsiem Bashynrang
4. U Ingkhong Shyllangmat

III. KI PHAWER U AESOP

Lynnong: 41-50

IV. KI JINGSNENG TYMMEN (PART-I)

Lynnong: 31-40

III. RAPID READER

Pieces to be read:

1. Ka Nobel Prize
2. Ka Kheĩnkur Kheĩnkha
3. Ka Trei Ka Ktah Ha Ri Khasi Jaiĩtia

IV. GRAMMAR, COMPOSITION & ESSAY

1. The Adverb
2. Adverb and words with which they are used
From Alphabet 'M' to 'W' Page – 76 to 81
3. Comprehension
4. Essay

PRESCRIBED TEXTBOOKS:

1. **Prose**
 - Ki Dienjat Jong Ki Longshuwa – *J. Bacchiarello*
 - Ki Phawer U Aesop – *Soso Tham*
 - Ki Jingsneng Tymmen (Part-I) – *Radhon Sing Berry*
2. **Poetry**
 - Ka Duitara Ksiar – *Soso Tham*
3. **Rapid Reader**
 - Na Mihngi Sepngi – *H. Elias*
4. **Grammar & Composition**
 - Hints on the Study of Khasi Language – Ri Khasi Publication, Mawkhar, Shillong – 793001.

MIZO (MIL)
CLASS - X

DISTRIBUTION OF MARKS

Hla (Poetry)	20 marks
Thu (Prose)	30 marks
Mizo Grammar	20 marks
Thawnthu tawi (Rapid Reader)	10 marks
Total	80 marks

MARKING FOR INTERNAL ASSESSMENT

1. Writing skill - Project work, home assignment, composition, amplification, story writing.	10 marks
2. Listening and Reading skill - Dictation, Recitation, News reading, extempore debating.	10 marks
Total	20 marks

I. THU (PROSE)

Pieces to be read:

1. Nun kawng - *R. L. Thanmawia*
2. Thalaite Khawvel - *Siamhnuna Khawlhkring*
3. Mizo Thufing
4. Zawlbuk - *C. Lianhmingthanga*
5. Peihna - *Sangzuala*
6. Nihna - *Darchhawna*
7. Mizote leh an nihna - *B. Lalthangliana*
8. Tihdan tha
9. Tlemte ka chhiar a, ka Pass tho - *Zikpuii pa*

II. HLA (POETRY)

Pieces to be read:

1. Aw Lalpa, Davida leh a thlah arsi - *Patea*
2. Kum sul liam hnu - *C. Lalkhawliana*
3. Chhul khat kual - *C. Durthanga*
4. Zofate inpumkhatna - *C. Chhuanvawra*
5. Zo bawmtu chhawkhlei par - *H. Lalringa*
6. Zirtu kawng - *Selet Thanga*
7. Mahriak ten a rang ka vai e Parte - *Lalzova*
8. Chhingkhual len mawi - *P. S. Chawngthu*

III. MIZO GRAMMAR

1. Parts of Speech thenkhat – Verb, Adjective, Adverb
2. Mizo tawng hman dik loh thinte
3. Tawng Upa

IV. THAWNTHU TAWI (RAPID READER)

Tualte Vanglai – *Pastor Nikhama*

PRESCRIBED TEXTBOOK:

- **Class X Mizo** – *MBSE Publication*

NEPALI (MIL)
CLASS - X

DISTRIBUTION OF MARKS

Prose	30 marks
Poetry	18 marks
Rapid Reader	10 marks
Grammar & Composition	22 marks
Total	80 marks

MARKING FOR INTERNAL ASSESSMENT

1. Reading Recitation, Dictation, Extempore speech, Elocution	05 marks
2. Home assignment – self composed poem or to write the life story of any poet or author	10 marks
3. Project Work - a) To develop the story from the given picture (visual clue) b) Slogan writing c) Chart making on the basis of Lessons (Paste Pictures and Drawings)	05 marks
Total	20 marks

I. PROSE

Pieces to be read:

1. Shikchhachha ko Udhesya
2. Alijheko Ichchha
3. Paras Mani Pradhan
4. Chitthi
5. Paribanda
6. Saya Rupriyanko note
7. Charlicheplin: Ek Asaadharan Vyaktittyo

II. POETRY

Pieces to be read:

1. Gaunthaliko Chiribiri
2. Garib
3. Sweet Falls
4. Sirja Auta Kagajko Itihas
5. Bhanubhakta Prati
6. Adhikar Ra Kartavya

III. RAPID READER

- 'Maitha Ghara' by Shri Lain Singh Bangdel

IV. GRAMMAR & COMPOSITION

Pieces to be read:

1. Essay Writing (Nibandha Lekhan)
2. Comprehension (Bodh Pranali)
3. Letter Writing (Patra Lekhan)
4. Amplification (Vistritikaran)
5. Paragraph Writing (Anuchhed Lekhan)
6. Linga, Sangya, Visheshan, Sandhi, Kriya Rayasko Prakar
7. Dhatu Ra Pratyay, Upasarga, Vachya, Vakyansha, Ukhan Ra Tukka
8. Viparitarthak Shabda, Sammocharit Shabda, Prayayvachi Shabda, Shar Shabda

ESTIMATED NUMBER OF PERIODS PER WEEK = 5 (FIVE)

Note: - Teachers may take the help of any other Grammar Book available in the market for their reference.

PRESCRIBED TEXTBOOKS:

1. Prose & Poetry

- **Madhyamik Nepali Sahitya Bhag V**
Edited by Dr. Tek Narayan Upadhaya
Published by Text Book Committee (Nepali) Shillong, Meghalaya

2. Rapid Reader

- **'Maitha - Ghara' by Shri Lain Singh Bangdel**
Saajha Prakashan, Kathmandu, Nepal.

3. Grammar & Composition

- (i) **Madhyamik Nepali Vyakaran Ra Rachana**
Written & Compiled By the Expert Academicians
Shri Raaj Prakashan, Darjeeling
OR
- (ii) **Vyakaran Saurabh (Chautho Bhaag) (Part - IV)**
Written by Vishnu Sharma Adhikari
Puspa Prakashan, Siliguri.

URDU (MIL)
CLASS - X

DISTRIBUTION OF MARKS

Prose	25 marks
Poetry	15 marks
Grammar	20 marks
Life History	10 marks
Essay	10 marks
Total	80 marks

MARKING FOR INTERNAL ASSESSMENT

1. Reading/Recitation: Reading or reciting passages or verses in Urdu from seen or unseen prose or poetry.	04 marks
2. Writing: Writing paragraphs or verses in Urdu on the topics related to literature or science or environment.	04 marks
3. Comprehension: Understanding passages or verses in Urdu from seen or unseen prose or poetry.	04 marks
4. Life-Sketch: Representing a brief Life-Sketch of authors or poets in Urdu on a chart paper whose writings are included in the academic syllabus.	04 marks
5. Extempore Speech/Group Discussion: A short extempore speech or Group discussion on the topics related to literature or science or environment in Urdu.	04 marks
Total	20 marks

I. PROSE

Pieces to be read:

Afsana

Writer

- | | |
|-----------------|---------------------|
| 1. Naya Guanoon | Sadat Hassan Mantoo |
| 2. Bheek | Hayat-u-Ilah Ansari |

Sawaneh (life history)

- | | |
|------------------------|--------------------|
| 3. Sirsyed Ka Bachapan | Altaf Hussain Hali |
|------------------------|--------------------|

Darama

- | | |
|-------------|-----------------|
| 4. Aazmaish | Mohammad Mujeeb |
|-------------|-----------------|

Aapbiti

- | | |
|----------------------------|-------------------|
| 5. Chori our Uska Kaffarah | Syed Abid Hussain |
|----------------------------|-------------------|

Mazmoon

- | | |
|------------------------|---------------------|
| 6. Auraton Ke Haquoque | Sir Syed Ahmad Khan |
| 7. Makhaloote Zuban | Maulavi Abdul Haque |

- | | | |
|----|--------------------|------------------------|
| 8. | Mahaul Bachaia | Mohammad Aslam Perveez |
| 9. | Chakabast Lakhnavi | Aal Ahmed Sarvar |

II. POETRY

Pieces to be read:

Ghazal

1. Bahar Besapre jam Guzre hai
2. Lai Heyat
3. Dhondage agar Mulkon Mulkon
4. Aalam-e-Razagar

Poets

- Mirza Mohammad Rafi Sauda
 Sekh Mohammad Ibrahim Zoque
 Shad Aazimabadi
 Asgar Goudave

Nazam

5. Jalwae Darbar-e-Dehli
6. Haquiquat-e-Husn
7. Aandhi
8. O-Des-Se A'anewale Bata

Poets

- Akbar Illahabadi
 Mohammad Iqubal
 Kaifi Azami
 Akhtar Shiravi

Rubai

- | | | |
|----|---|---------------------|
| 9. | (i) Gulshan mein Phiron ke Saire Sehra Dekhon | Anis |
| | (ii) Rutba jise dunia mein khuda deta hai | Anis |
| | (iii) Fitrat ki dihoi musarrat kho kar | Tilok Chand Mahroom |
| | (iv) Mazhab ki zuban | Tilok Chand Mahroom |
| | (v) Har aib se mana ke juda hojai | Firaque Gorakhpuri |

PRESCRIBED TEXTBOOKS:

1. **Prose & Poetry**
 - **Nawa-e-Urdu (NCERT)**
2. **Urdu Grammar Book**
 - **NCERT**

MATHEMATICS
CLASS - X

DISTRIBUTION OF MARKS

1.	Number Systems	04 marks
2.	Algebra	20 marks
3.	Co-ordinate Geometry	08 marks
4.	Trigonometry	12 marks
4.	Geometry and Construction	16 marks
5.	Mensuration	10 marks
6.	Statistics and Probability	10 marks
	Total	80 marks

WEIGHTAGE OF MARKS FOR INTERNAL ASSESSMENT

The Internal Assessment of 20 marks is to be awarded on the basis of the performance of a student in the activity work, project work and continuous assessment as per the following scheme.

- Assessment through test – 10 marks
- Assessment of Project Work – 5 marks
- Assessment of 2 skills – 5 marks.

For its effective implementation, the following aspects of the scheme should be kept in view:

- a. Internal examination is to be conducted at the school level to assess the activity work and project work done by every student during the year.
- b. Each student must perform at least two activities for assessment of any two skills like numerical ability, observation, ability to see patterns, analytical thinking, understanding logic, skills of comparing, interpreting, problem solving, decision making and skills of games.
- c. The assessment may be carried out by a team of two Mathematics teachers including the teacher teaching the particular class

The break-up of 5 marks for assessment of **activity/skills** could be as:-

- | | | | |
|---|--|---|---------|
| - | Statement of the objective of activity | - | 01 mark |
| - | Design of approach to activity | - | 01 mark |
| - | Actual conduct of activity | - | 01 mark |
| - | Procedure explanation | - | 01 mark |
| - | Result and conclusion | - | 01 mark |

The marks for assessment of two activities (5 + 5) may be added and the average should be calculated out of 5.

The breakup of 5 marks for assessment of **project** could be as:-

-	Identification and statement of the project	-	01 mark
-	Design of the project	-	01 mark
-	Procedure adopted	-	01 mark
-	Write-up of the project	-	01 mark
-	Interpretation of the result	-	01 mark

UNIT I : NUMBER SYSTEMS

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. Decimal representation of rational numbers in terms of terminating/non – terminating recurring decimals.

UNIT II : ALGEBRA

1. Polynomials

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

2. Pair Of Linear Equations In Two Variables

Pair of linear equations in two variables and graphical method of their solution, consistency/inconsistency. Algebraic conditions for number of solutions. Solution of 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.

3. Quadratic Equations

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

Situational problems based on quadratic equations related to day to day activities to be incorporated.

4. Arithmetic Progressions

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

UNIT III : TRIGONOMETRY

1. Introduction to Trigonometry

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° and 90° . Values (with proofs) of the trigonometric ratios of 30° , 45° and 60° . Relationships between the ratios.

2. Trigonometric Identities

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: Angle of elevation, Angle of depression

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

1. Lines (In two-dimensions)

Review the concepts of coordinates geometry, graphs of linear equations. Distance formula. Section formula (internal division), Area of a triangle.

UNIT V : GEOMETRY

1. Triangles

Definitions, examples, counter examples of similar triangles.

- i) (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.
- ii) (Motivate) If a line divides two sides of a triangle in the same ratio, the line is parallel to the third side.
- iii) (Motivate) If in two triangles, the corresponding angles are equal, their corresponding sides are proportional and the triangles are similar.
- iv) (Motivate) If the corresponding sides of two triangles are proportional, their corresponding angles are equal and the two triangles are similar.
- v) (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.
- vi) (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.
- vii) (Prove) The ratio of the areas of two similar triangles is equal to the ratio of the squares on their corresponding sides.
- viii) (Prove) In a right triangle, the square on the hypotenuse is equal to the sum of the squares of the other two sides.
- ix) (Prove) In a triangle, if the square on one side is equal to the sum of the squares of the other two sides, the angle opposite to the first side is a right angle.

2. Circles

Tangents to a circle at a point of contact.

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

3. Constructions

- i) Division of a line segment in a given ratio (internally).
- ii) Tangent to a circle from a point outside it.
- iii) Construction of a triangle similar to a given triangle.

UNIT VI : MENSURATION

1. Areas Related to Circles

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

2. Surface Areas And Volumes

- i) Surface areas and volumes of combinations of any two of the following: cubes, cuboids, spheres, hemispheres and right circular cylinders/cones. Frustum 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 may be taken).

UNIT VII : STATISTICS AND PROBABILITY

1. Statistics

Mean, median and mode of grouped data (bimodal situation to be avoided) Cumulative frequency graph.

2. Probability

Classical definition of Probability. Simple problems on single events (not using set notation).

PREScribed TEXTBOOK:

- **Modern's abc of Mathematics – X**
M/S Modern Publishers Chancellor Commercial, H. B. Road,
Panbazar, Guwahati – 781001.

SCIENCE & TECHNOLOGY
CLASS - X

DISTRIBUTION OF MARKS

Physics	26 marks
Chemistry	26 marks
Biology	28 marks
Total	80 marks

PHYSICS

1. REFLECTION AND REFRACTION OF LIGHT

□ Light as Invisible Energy □ Nature of Light □ Reflection of Light □ Position of the Image formed by a Plane Mirror □ Spherical Mirrors and Their Technology □ Sign Conventions for Reflection by Spherical Mirrors □ Refraction of Light □ Refraction by Spherical Lenses □ Power of a Lens □ New Cartesian Sign Convention for Lenses

2. THE HUMAN EYE AND THE COLOURFUL WORLD

□ Human Eye □ Accommodation of the Eye □ Defects of Vision and Their Correction □ Advantages of having two eyes in Humans □ Refraction of Light Through an Equilateral Prism □ Dispersion of White Light by a Glass Prism □ Atmospheric Refraction □ Scattering of Light

3. ELECTRICITY

□ Electric Charges and its Properties □ Conductors and Insulators □ Flow of Electric Charges Electric Current □ Electric Potential □ Electric Circuit □ Resistance of a Conductor or Electric Resistance □ Series and Parallel Circuits □ Ohm's Law □ Expression for Resistances in Series □ Expression for Resistances in Parallel □ Heating Effects of Electric Current

4. MAGNETIC EFFECTS OF ELECTRIC CURRENT

□ Magnetic Field and Field Lines □ Solenoid □ Force on a Current Carrying Conductor in a Magnetic Field □ Electromagnetic Induction □ Domestic Electric Circuits

CHEMISTRY

1. CHEMICAL REACTIONS

□ Introduction □ Chemical Equation □ Types of Chemical Reactions □ Effects of Oxidation Reactions in Everyday Life

2. ACIDS, BASES AND SALTS

□ Introduction □ Understanding the Chemical Properties of Acids and Bases □ What Do All Acids and All Bases have in Common □ How strong are Acid or Base Solutions □ More about salts

3. METALS, NON-METALS AND METALLURGY

□ Physical Properties of Metals and Non-metals □ Formation of Ionic Compounds □ Chemical Properties of Metals □ Specimen Problems □ Occurrence of Metals □ Corrosion of Metals

4. CLASSIFICATION OF ELEMENTS

□ Necessity for Classification of Elements □ Early Attempts for Classification of Elements □ Mendeleev's Periodic Table □ Mendeleev's Periodic Law □ Modern version of Mendeleev's Periodic Table of Elements □ Defects (Limitations) in Modern Version of Mendeleev's Periodic Table of Elements □ Modern Periodic Law □ Long form of Periodic Table □ Position of Hydrogen in the Periodic Table □ Study of Normal Elements of the Periodic Table □ Characteristics of Periods in Long form of Periodic Table □ Characteristics of Groups in Long form of Periodic Table □ Merits of the Long form of Periodic Table □ Defects of the Long form of the Periodic Table □ Advantages of the Long form of the Periodic Table in Learning Chemistry □ Sample Problems

5. CARBON AND ITS COMPOUNDS

□ Introduction □ The Covalent Bond-Bonding in Carbon and other Non-metals □ Versatile Nature of Element Carbon □ Chemical Properties of Carbon Compounds □ Important Carbon Compounds-Ethanol and Ethanoic Acid □ Soaps And Detergents

BIOLOGY

1. LIFE PROCESSES

□ What are life processes? □ Nutrition □ Autotrophic Nutrition □ Heterotrophic Nutrition □ How do organisms obtain their Nutrition? □ Respiration □ Transportation □ Transportation in Human beings □ Transportation in Plants □ Excretion □ Excretion in Human beings

2. CONTROL AND COORDINATION

□ Animals – Nervous system □ Structure of Neuron □ How does an impulse travel in the Body? □ Types of Nervous Actions □ What happens in Reflex Actions? □ Human Nervous System □ How are these tissues protected □ How does the Nervous Tissue cause Action? □ Coordination in Plants □ Immediate response to stimulus □ Movement due to Growth □ Plant Hormones □ Hormones in Animals □ Endocrine Glands in Humans

3. REPRODUCTION IN PLANTS AND ANIMALS

□ Do organisms create exact copies of themselves? □ The importance of variations □ Modes of reproduction used by single organisms □ Fission □ Fragmentation □ Regeneration □ Budding □ Vegetative propagation □ Spore formation □ Sexual reproduction □ Why the Sexual mode of Reproduction? □ Sexual Reproduction in Flowering Plants □ Reproduction in Human Beings □ Male Reproductive System □ Female Reproductive System □ What happens when the egg is not fertilised? □ Reproductive health

4. HEREDITY AND EVOLUTION

□ Accumulation of variation during reproduction □ Heredity □ Inherited traits
□ Rules for the Inheritance of traits – Mendel's contribution □ How do these traits get expressed? □ Evolution □ Acquired and inherited traits □ Speciation □ Evolution and classification □ Evolution by stages □ Evolution should not be equated with 'progress' □ Human Evolution.

PRACTICAL

Total – 20 marks

Every student will perform at least fifteen experiments (at least five experiments from each unit) during the academic year.

PHYSICS

1. To verify the laws of reflection of light using plane mirror.
2. To determine the focal length of a concave mirror by obtaining image of a distant object.
3. To trace the path of a ray of light passing through a rectangular glass slab for different angle of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result.
4. To determine the focal length of a convex lens by obtaining the image of a distant object.
5. To trace the path of a ray of light passing through a glass prism and measure the angle of deviation.
6. To study the dependence of potential difference (v) across a resistor, determine its resistance.
7. (a) To determine the equivalent resistance of two resistors when connected in series
parallel.
(b) To determine the equivalent resistance of two resistors when connected in parallel.

BIOLOGY

1. To study land food chain from the given chart.
2. Construction of food web using models.
3. To study the different parts of a Hibiscus flower.
4. To study germination of grams/pea seeds.
5. To test the presence of starch in a given food sample.
6. To study various things around and classify them into living and non-living.
7. To identify bio-degradable and non-biodegradable materials (wastes) in the environment.
8. Collection of newspaper reports on HIV/AIDS.

CHEMISTRY

1. To measure the change in temperature during chemical reaction (at least four) and conclude whether the reaction is exothermic or not.

2. To identify bleaching powder from the given samples of chemicals (four samples).
3. To identify baking soda from samples of chemicals (four samples).
4. (a) To study on precipitation reaction and isolation of the precipitate, Na_2SO_4 with BaCl_2
(b) To study on precipitation reaction and isolation of precipitate, NaCl with AgNO_3 .
5. To prepare Sulphur dioxide gas and study its two physical and two chemical properties.
6. Carry out the reactions for an acid (HCl) with:
 - (i) Litmus solution (blue/red),
 - (ii) Zinc metal,
 - (iii) Solid Sodium carbonate
 - (iv) Sodium hydroxide.
7. To prepare ammonia gas and study its two physical and two chemical properties.
8. To study properties of acetic acid (ethanoic acid).
 - (i) odour
 - (ii) solubility in water
 - (iii) effect on litmus
 - (iv) reaction with sodium bicarbonate
9. To identify whether a given solution is acidic or basic, performing following test is required:
 - (i) Litmus test,
 - (ii) Reaction with NaHCO_3 or Na_2CO_3
 - (iii) Reaction with NH_4OH or $(\text{NH}_4)_2\text{CO}_3$
10. To study the decomposition of CaCO_3 and prove that CO_2 is evolved during the reaction (lime water test)
11. To perform the reaction of 1: 1 molar acetic acid and ethanol (ethyl alcohol) in the presence of sulphuric acid.
12. To examine the heating effect on sugar and common salt, observe the change and find the nature of bonding in the two compounds.
13. To determine the pH value of equimolar concentration of four acids and arrange them in order of their increasing acidity.

PRESCRIBED TEXTBOOKS:

1. **Core Science - X**
- M/S Goyal Brothers Prakashan, D-231-232, Sector-63, Noida - 201301 (UP).
2. **Practical Science - X**
- M/S Laxmi Publications Pvt. Ltd., Hemsan Complex, M. D. Shah Road, Paltan Bazar, Guwahati - 781008.

SOCIAL SCIENCE
CLASS - X

THE SCHEME OF ASSESSMENT FOR THEORY EXAMINATION.

One Paper	Theory Examination = 80 marks	Pass marks = 24
	Internal Assessment = 20 marks	Pass marks = 6
	(for regular candidates)	

DISTRIBUTION OF MARKS

Unit	Parts/Sections	Theory
Section I	History	23
Section II	Civics	17
Section III	Economics	17
Section IV	Geography (Including map works and Disaster Management)	23
Total		80

WEIGHTAGE OF MARKS FOR INTERNAL ASSESSMENT

<i>Each subject segment carries the following weightage of marks for Internal Assessment:</i>	
i) History	5 marks
ii) Civics	5 marks
iii) Economics	5 marks
iv) Geography	5 marks
Total	20 marks

These marks can be internally assessed through any one of the following:

- i. Project Work
- ii. Written Tests
- iii. Assignments (Class or Home Work)

Different types of Project Work:

- Class/Interclass discussions and debates
- Preparations of a report based on newspapers/magazines clippings
- Conducting a survey in the locality (activity to be accompanied by a brief report)
- Posters
- Mock drills to deal with fire mishaps, earthquakes, flood and landslides to be practiced for the topic, 'Disaster Management.'

SECTION I: HISTORY

Unit I: Events and Processes

1. The Rise of Nationalism in Europe
2. Non-Cooperation and Civil Disobedience Movements

Unit II: Livelihoods, Economies and Societies

3. Industrialisation (1850s-1950s)
4. Urbanisation and Urban Lives

Unit III: Culture, Identity and Society

5. Print Culture and Nationalism
6. Financial Education
- Part I:** Electronic Commerce (e-commerce)

Part II: E-Commerce and Financial Regulatory Bodies of Country

Part I: Information Technology in Insurance Sector

Part II: Insurance Ombudsman

} only for classroom transaction and Internal Assessment.
- 7.

SECTION II: GEOGRAPHY

1. Resources
2. Water Resources
3. Forest Resources
4. Minerals and Energy Resources
5. Agriculture
6. Manufacturing Industries
7. Lifelines of National Economy
8. Meghalaya: An Overview
9. Planning Ahead: by the People, for the People

SECTION III: CIVICS

1. **Unit I:** Role of Caste in Indian Politics and Communalism
2. **Unit II:** Nature of Indian Federal Structure
3. **Unit III:** Popular Struggles and Movements
4. Political Parties
5. Challenges to Democracy
6. Voters' Awareness and its Importance
7. Women's Rights in India
8. Supreme Court's Ruling on Child Abuse
9. The Rights of Persons with Disabilities Act, 2016
10. **Financial Education**
Commodity Futures Market
11.

Part I: Economic Depression

Part II: Investing in Shares

Part III: Initial Public Offering (IPO)

} only for classroom transaction and Internal Assessment.

SECTION IV: ECONOMICS

1. Sectors of the Indian Economy
2. The Story of Development
3. Money and Financial System
4. Globalisation and the Indian Economy
5. Consumer Rights
6. **Financial Education**
Benefits of Insurance
7. **Part I:** Learning to Trade
Part II: Stock Exchange and Economy

} only for classroom transaction
and Internal Assessment

PRESCRIBED TEXTBOOKS:

Core Social Science – X

- M/S Goyal Brothers Prakashan, D-231-232, Sector-63,
Noida – 201301 (UP)

HEALTH & PHYSICAL EDUCATION
CLASS - X

Theory	-	80 Marks
Internal Assessment	-	20 Marks
Total =		100 Marks

WEIGHTAGE OF MARKS FOR INTERNAL ASSESSMENT

The Internal Assessment will be done through tests, assignments and project work. The breakup of 20 marks for the Internal Assessment may be as follows:

Part - 1	-	Written tests	-	10 marks
Part - 2	-	Assignments	-	5 marks
Part - 3	-	Project Works	-	5 marks

The Internal Assessment of 20 marks is to be awarded on the basis of the performance of a student in the activity work, project work and assessment on the assignments given at the end of each lesson of the textbook.

The break-up of 5 marks for Assignments could be as:-

-	Statement of the skills/activity	-	01 mark
-	Elaboration of the skills/activity	-	01 mark
-	Procedure of explanation	-	01 mark
-	Actual conduct of activity	-	01 mark
-	Conclusion	-	01 mark

The marks for assessment of two activities (5+5) may be added and the average should be calculated out of 5

The break-up of 5 marks for assessment of project could be as:-

-	Identification and statement of the project	-	01 mark
-	Design of the project	-	01 mark
-	Procedure adopted	-	01 mark
-	Write-up of the project	-	01 mark
-	Interpretation of the result	-	01 mark

To implement them successfully, the following aspects of the scheme should be kept in view:-

- (a) Internal Examination is to be conducted at the school level to assess the activity and project work done by each student.

- (b) Each student is required to choose at least two activities during the year.
- (c) Assessment may be carried out by a team of two teachers including the teacher teaching this particular subject.

NOTE: Schools may choose their own topics for Internal Assessment.

Units to be read

Unit I Growth and Development

1. How Mature Are You?
2. You and Your Family
3. Marriage and Family Life

Unit II Diseases

1. Some Defence Measures Against Diseases (Immunity and Immunization)
2. National Health Programme
3. Importance of Pupil's and People's Participation in the Implementation of These Programmes
4. Primary Health Care, Meaning and Scope, Health Care Set Up in Rural and Urban Areas

Unit III Consumer Education

1. Consumer Education - Consumer Rights, Making Correct Choices While Buying Different Items, Food Adulteration
2. Systems of Medicine and Quackery
3. Drugs, Medicines and Self-Medication

Unit IV International Health

1. Importance of International Health

Unit V Life Skills Education

1. Teenage Pregnancy
2. Sexually Transmitted Infections
3. Basic Facts About HIV/AIDS
4. Prevention Against HIV/AIDS

PRESCRIBED TEXTBOOK:

- **Health (A Textbook for Secondary School Class X)**
M/S Frank Brothers & Co. Ltd., 136, Moti Lal Nehru Road, Opp. Pan Bazar
Girls' Hr. Sec. School, Guwahati - 781001.

COMPUTER SCIENCE
CLASS - X

DISTRIBUTION OF MARKS

Sl. No.	Chapter	Theory Mark	Practical Mark
1	Computer Fundamentals	20	5
2	Internet Basics	18	5
3	Object Oriented Programming I - C++	18	5
4	Object Oriented Programming II - Java	16	5
5	Societal Impacts of IT - II	8	-
	Total Mark	80	20

PIECES TO BE READ:

1. Computer Fundamentals

- Types of Software
- System Software
- Operating System
- Language Translators
- Utilities
- Application Software
- Basic Commands in Operating Systems
- What is Data?
- How to Measure Computer Data?
- Number System
- Conversion
- Logic Gates
- Logic Circuits of Primary and Secondary Gates

2. Internet Basics

- Internet
- How Does the Internet Work?
- Wired and Wireless connection
- Protocols
- World Wide Web (WWW)
- Web Browser
- Web Server
- Website
- Web Page

- Web Address
- IP Address
- Uniform Resource Locator (URL)
- Intranet
- HTML
- HTML Editor
- Creating and Viewing HTML Documents
- HTML Tag
- HTML Element
- Structure of an HTML Document
- HTML Heading Tag
- HTML Paragraph tag
- Line Break tag
- Horizontal Rule tag
- Text Formatting Tags
- Comment Tag
- List Tags
- Images In HTML Tables In HTML
- Linking In HTML
- Frames In HTML

3. **Object Oriented Programming I – C++**

- What is OOPs?
- Introduction to C++
- Structure of a C++ program
- Data types
- Variables in C++
- Escape Sequences
- Input / Output in C++
- Operators
- Precedence of operators
- Control Structure
- Loop Structure
- Bug and Debug

4. **Object Oriented Programming II – Java**

- Characteristics of Java
- Different Forms of Java
- Java Program
- Variables
- Data Types

- Operators In Java
- Programming Structure in Java
- Some Examples of Java Programs

5. **Societal Impacts of IT – II**

- Virus
- Worm
- Malware
- Spyware
- Scareware
- Adware
- Spam
- Internet Hacking
- Protect the Computer
- Backup and Recovery Tools
- Information Security Provisions in E-commerce
- Ways for safety computing

PRESCRIBED TEXTBOOK:

- **Click Start –
Computer Science for Schools – 10**
M/S Cambridge University Press, 10 Raja Subodh Mallick Square Second
Floor, Kolkata – 700013.

ENVIRONMENTAL EDUCATION

CLASS - X

PIECES TO BE READ:

UNIT I: RESTORING BALANCE IN ECOSYSTEM

1. Need for Conservation and Management of Water
2. Conservation and Management of Forests, Grasslands and Semi-Arid Ecosystems
3. Conservation and Management of Soil
4. Conservation and Management of Wildlife
5. Relevance of Indigenous Practices

UNIT II: POLLUTION

1. Sources of Pollution and Major Pollutants
2. Effects of Pollution on Environment, Human Health and Other Organisms
3. Abatement of Pollution

UNIT III: ISSUES OF THE ENVIRONMENT

1. Decline in Productivity; Resettlement and Rehabilitation of People
2. Energy Crisis – Urban and Rural Sectors
3. Greenhouse Effect, Climatic Changes and Global Warming
4. Acid Rain and Ozone Layer Depletion

UNIT IV: STRIVING FOR A BETTER ENVIRONMENT

1. Use of Efficient and Eco-friendly Technology
2. Ecological Restoration and Conservation

PRESCRIBED TEXTBOOK:

- **A Textbook of Environmental Education – X**
M/S. Goyal Brothers Prakashan, D-231-232, Sector-63, Noida – 201301 (UP).

Note: *Evaluation on subject Creative Expression shall be school based grading.*

CREATIVE EXPRESSION
CLASS - X

- The whole book is to be completed -

PRESCRIBED TEXTBOOK:

- **WOW! ART & CRAFT - X**
M/S. Allied Publishers, 1/13-14, Asaf Ali Road, New Delhi - 110002.

Note: *Evaluation on subject Creative Expression shall be school based grading.*

WORK EDUCATION
CLASS - X

PIECES TO BE READ:

1. Photography
2. Commercial Art
3. Tie & Dye
4. Interior Decoration
5. Gardening
6. Woodwork
7. Puppet Making
8. Papercraft
9. Working with Leather
10. Chemical Technology
11. Designing and Stitching
12. Community Service: Adult Literacy Program
13. Food Preservation
14. Electrical Gadget
15. Computer: Making a Web Page

PRESCRIBED TEXTBOOK:

- **Work Education - X**
M/S. Allied Publishers, 1/13-14, Asaf Ali Road, New Delhi - 110002.

Note: *Evaluation on subject Work Education shall be school based grading.*