

City Montessori School, Lucknow
Syllabus 2026 – 2027
Class XI

S.No.	Subject	Page Number
1.	Moral Education	6
2.	English Language	7
3.	English (Prescribed Texts) 801	12
4.	English (Modern English) 891	14
5.	Hindi	16
6.	Mathematics	19
7.	Applied Mathematics	21
8.	Physics	22
9.	Chemistry	25
10.	Biology	27
11.	Economics	31
12.	Business Studies	33
13.	Accounts	36
14.	Computer Science	38
15.	History	41
16.	Psychology	43
17.	Biotechnology	44
18.	Geography	47
19.	Physical Education	50
20.	Sociology	52
21.	Fashion Designing	54
22.	Political Science	57
23.	Legal Studies	59
24.	Mass Media and Communication	60
25.	Robotics	61
26.	Artificial Intelligence	64
27.	Environmental Science	68

NOTE: Please refer to ISC Council Syllabus and Scope of Syllabus 2028 for further reference.

AIMS AND OBJECTIVES

MORAL EDUCATION:

1. To develop in every student the essential elements of morality.
2. To develop the values and capabilities necessary for making right decisions and upright conduct.
3. To develop in them the attitude of open mindedness, to appreciate and be ready to accept others and to act constructively not defensively.
4. To develop the skill of striving not only for good but to handle the conflicting situations without demeaning self and others.
5. To develop the ability to monitor themselves and find out constructive ways of conflict resolutions.
6. To promote the development of good character for the purpose of lessening crime and raising the standard of good citizenship.

ENGLISH LANGUAGE:

1. To develop habits of:
 - a. clear articulate expression, using accepted syntactical forms and structures with a firm grasp of idioms;
 - b. critical thinking, involving assessment and analysis of the written material provided.
2. To develop the capacity to critically and innovatively examine and to assess the value of passages of argumentative writing, to consider the assumptions upon which the arguments rest and to trace the implications that follow.
3. To develop adequate and appropriate vocabulary.
4. To develop the ability to comprehend and appreciate good prose.

ENGLISH (Prescribed Texts):

1. To develop an appreciation of literature through a critical study of selected literary works.
2. To help students achieve through the study of literature, an understanding of the study of man.
3. To create an interest in the warp of thought, which differs from that of the group to which, the student belongs.
4. To develop the power of expression.

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

HINDI:

1. To develop habits of clear articulate expression using accepted syntactical forms and structures, with a firm grasp of idiom and to comprehend and appreciate good prose.
2. To expose candidates to a deeper knowledge and appreciation of literary works in the language.

HISTORY:

1. To provide accurate knowledge of the most significant events and personalities of the period under study in sequence and in context.
2. To familiarise candidates with factual evidence.
3. To develop an understanding of the existence of problems and relevance of evidence of explanations.
4. To develop the capacity to marshal facts and evaluate evidence and to discuss issues from a historical point of view.
5. To develop the capacity to read historical views in the light of new evidence or new interpretation of evidence.
6. To foster a sense of historical continuity.
7. To familiarise candidates with various types of historical evidence and to provide some awareness of the problems involved in evaluating different kind of source materials.

PSYCHOLOGY:

1. To develop an understanding of human behaviour: the nature of individuals and of members of social groups.
2. To develop an understanding of the methods of research and study employed in psychology.
3. To develop an appreciation of the practical value of psychology and its applications in daily life.

ECONOMICS:

1. To enable candidates to acquire knowledge, information and develop an understanding of facts, terms, concepts, conventions, trends, principles, generalisations, assumptions, hypothesis, problems, processes etc. in economics.
2. To acquaint candidates with tools of economic analysis.
3. To develop an understanding of important economic problems.
4. To acquaint candidates with the main institutions through which the productive process is carried out.
5. To develop an understanding of the role of institutions in the functioning of an economy.

He who has imagination without learning has wings but no feet.
– Joseph Joubert

6. To enable candidates to compare their own economic structure with that of the other areas of the world.

COMMERCE:

1. To develop an interest in the theory and practice of business, trade and industry.
2. To familiarise candidates with theoretical foundations, organising, managing and handling operations of a business firm.
3. To provide a study of the more important aspects of the commercial world.
4. To provide knowledge of the activities of commerce in the marketing of goods and services.

ACCOUNTS:

1. To provide an understanding of the principles of accounts and practice in recording transactions and interpreting individual as well as company accounts.
2. To develop an understanding of the form and classification of financial statements as a means of communicating financial information.

MATHEMATICS:

1. To enable candidates to acquire knowledge and to develop an understanding of the terms, concepts, symbols, definitions, principles, processes and formulae of mathematics.
2. To develop the ability to apply the knowledge and understanding of mathematics to unfamiliar situations or to new problems.
3. To develop skills of –
 - computation
 - drawing geometrical figures and graphs
 - reading tables, charts, graphs, etc.
4. To develop an appreciation of the role of mathematics in day-to-day life.
5. To develop an interest in mathematics.
6. To develop a scientific attitude through the study of mathematics.

PHYSICS:

1. To enable candidates to acquire knowledge and to develop an understanding of the terms, facts, concepts, definitions, fundamental laws, principles and processes in the field of physics.
2. To develop the ability to apply the knowledge and understanding of physics to unfamiliar situations.
3. To develop a scientific attitude.
4. To develop skills in –
 - a. the practical aspects of handling apparatus, recording observations and
 - b. drawing diagrams, graphs etc.
5. To develop an appreciation of the contribution of physics towards scientific and technological developments and towards human happiness.

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

CHEMISTRY:

- To foster acquisition of knowledge and understanding of terms, concepts, facts, processes and principles.
- To develop the ability to apply the knowledge of contents and principles in new and unfamiliar situations.
- To develop skills in proper handling of chemicals and apparatus.
- To develop an ability to appreciate achievements and its role in nature and society.
- To develop an interest in activities involving the usage of the knowledge of chemistry.

BIOLOGY:

- To enable candidates to acquire the knowledge and to develop an understanding of biological terms, concepts, facts, principles, formulae, etc.
- To create awareness about the problems of the environment and the manner in which these problems can be overcome.
- To develop the ability to appreciate biological phenomena in nature and the contribution of biology to human welfare.
- To develop interest in plants and animals and in their respective environments.
- To develop scientific attitude towards biological phenomena.
- To create awareness of the fundamentals of human biology, food, health, nutrition and population control.

COMPUTER SCIENCE:

- To enable students to comprehend basic concepts and practices for problem solving.
- To develop an understanding of how a computer stores and processes data.
- To develop the ability to describe the major components of computer hardware and their functions and interactions.
- To develop the ability to analyse applications and systems of interacting objects.
- To develop the ability to code, test, debug, document and validate programs to implement various algorithms.
- To develop an appreciation of the implications of computer use in everyday life in contemporary society.

BIOTECHNOLOGY:

- To enable candidates to acquire the knowledge and develop an understanding of how materials are provided by biological agents to provide goods and services.
- To appreciate the role played by biotechnology in improving health care of human beings.
- To understand the interdisciplinary nature of this subject.
- To create awareness about the appreciation of biological processes to industries.

He who has imagination without learning has wings but no feet.
– Joseph Joubert

- To develop the ability to appreciate biological phenomenon in nature and the contribution of biotechnology to human welfare.
- To develop scientific attitude towards biological phenomenon.

ENVIRONMENTAL EDUCATION:

- To develop an in-depth understanding of various environmental issues and concerns of national and global importance.
- To develop a balanced view of the relationship between environment and development.
- To understand basic concepts related to sustainable development vis-a-vis improvement of quality of life.
- To develop a deeper concern for the environment and the sense of commitment and responsibility to take proactive action.
- To appreciate the variety in living organisms and recognise India as a mega-diversity nation.
- To appreciate the role of the individual, community, national and international agencies in resolving the environmental problems.

MORAL EDUCATION

Name of the Textbook: The Pathfinders Book - 2
Publisher: Foundation for Advancement of Science

April – January			
Suggested Month	Chapter Number	Name of the Chapter	
April – July	1	Motivation for Service	1-6
August	2	Life in Limbo	7-12
October	3	Love is the answer	13-18
November	4	The Source of Unfailing Guidance	19-24
December	5	Created to Love	25-30
January	6	The Missing Link	31-38

Note: Written work for every chapter mentioned above:

- Competence Building
- Group discussion.

ENGLISH LANGUAGE

Name of the Textbook: Total English
 Authors: Xavier Pinto & Dr Avanti Nisha
 Publisher: Morning Star

APRIL – SEPTEMBER		
Suggested Month		Name of the Topics
April – May		Proposal
		Directed Writing
		*Feature Article
		Functional Grammar
		a. transformation of sentences
		b. propositions
		c. tenses
July		FIRST MID TERM ASSESSMENT
July – September		Composition
	(a)	Narrative
	(b)	Descriptive
	(c)	Reflective
	(d)	Discursive
	(e)	Argumentative
	(f)	Story Writing
		Directed Writing
		* Newspaper Report
		- an accident
		- a natural calamity
		- coverage of an official function
		- visit of a dignitary
		- an incident
		Proposal
		Functional Grammar
		Comprehension

September		REVISION
September		HALF YEARLY EXAMINATION

OCTOBER – MARCH		
October – November		Directed Writing
		* Blog
		Functional Grammar
		Comprehension
December		SECOND MID TERM ASSESSMENT
December - February		Proposal
		Directed Writing
		*Book Review
		Functional Grammar
		Composition
		Comprehension
February		REVISION
February- March		ANNUAL EXAMINATION

* Questions are subject to change as per the latest Council Sample Paper, 2028.

* One Test Paper to be done every month.

Both Half-yearly and Annual Examination papers will be of 80 Marks.

Paper 1: English Language (3 hours, 80 marks)

Question 1 – A composition on one of a number of subjects.

(400-450 words)

... **20 marks**

Question 2 – (a) A short composition based on the information and ideas provided.

(250-300 words)

... **15 marks**

(b) Proposal Writing

... **10 marks**

Question 3 – Short-answer questions to test grammar, structure and usage. ... **15 marks**

Question 4 – Comprehension (about 700 words will be provided) ... **20 marks.**

Language Project:

Project work in class XI consists of assessment of candidates in listening and speaking skills which will be assessed in the following way:

1. Listening Skills:

A passage of about 500 words is read aloud, twice, the first time at normal reading speed (about 110 words a minute) and the next time at a slower speed. Students may make brief notes during the readings. They then answer objective type questions based on the passage on the paper provided.

2. Speaking Skills:

Students are to be assessed through an individual presentation of about three minutes followed by a discussion with the subject teacher, for another two or three minutes.

Some of the themes to be addressed in the assessment are - narrating an experience, giving directions or instructions on how to make or operate something, providing a description, giving a report, expressing an opinion or a theme based conversation.

Note: Please refer to the Council Syllabus and Scope of syllabus 2028 for details.

PROPOSAL WRITING

Guidelines and marks distribution for Proposal Writing, question 2(b)

General Instructions:

- Only student centric topics should be given for writing a proposal.
- Word limit is approximately 150 words. However, it should not exceed 160 words.
- It should be divided into three distinct parts i.e., the Heading, Objective and Measures.
- Heading and Objective must be written in a **paragraph** form and Measures in numbers and points / bullets.
- After each heading, using a colon sign (:) is a must.
- All paragraphs must be aligned towards the left.

1. Heading: The candidates will be required to convey the specific task that the project is supposed to achieve. It should be creative, clear and concise and have at least two points to define the purpose.

2. Objective: The candidates will be required to explain the goals and objectives of the proposed project. At least **two objectives in a paragraph** should be stated clearly.

3. Measures: The candidates will be required to explain the specific steps and method of what is to be done as:

1. What do they plan to do?
2. Total number of members involved in the project
3. Proposed activities
4. Time that will be taken to complete the project
5. Budgetary and non-financial needs, i.e. How much money will be spent on the project and what non-financial resources are required? (human capital, infrastructure, other resources required, etc.)

Concluding sentence . The proposal should be concluded with a sentence stating that you are hopeful that your proposal will be accepted.

Based on the above mentioned points, the mark distribution for different heads under proposal writing is as follows:

Maximum Marks: 10

Heading: 2
Objectives: 2
Measures: 4
Linguistic ability 2

SPECIMEN FOR PROPOSAL WRITING
PROPOSAL FOR SETTING UP A SCIENCE CLUB

Heading/Introduction: To foster an interest in Science outside the classroom and introduce students to the wonders and relevance of Science in our lives, we propose to set up a Science Club in school.
<i>(minimum 2 points – 2 marks)</i>
Objectives: A Science Club will help students overcome their phobias regarding Science. It will be instrumental in developing the scientific curiosity of students through its activities and programmes.
<i>(minimum 2 points – 2 marks)</i>
List of Measures:
<ul style="list-style-type: none"> • The middle-school activity room will be used as the room for all Science Club meetings and activities. • The meetings will take place once a week after school from 2.00 pm till 3.30 pm. Any activities such as talks by scientists or competitions will

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

<p>take place on Saturdays.</p> <ul style="list-style-type: none"> Membership of the Science Club will be open to all students from Classes VI to XII. The Club President will be Mr. Sinha, our Senior Physics Teacher. Eight other office bearers will be elected from the members of the Club. Club membership has been fixed at Rs. 250/- per member per year. The Club will have a range of activities ranging from Science Fairs, Robot making, creating slogans and posters, documentaries and so on.
<i>(minimum 4 points – 4 marks)</i>
<p>We hope that the proposal will be accepted so that the Science Club becomes a reality in the life of the school.</p>
<i>(linguistic ability – 2 marks)</i>
[Total – 10 marks]
<p>IMPORTANT NOTICE: It is suggested that while writing a proposal, the students provide an apt title, a Heading i.e. an introduction of about 2 sentences, a minimum of 2 objectives and a list of measures of a minimum of 4 points. The proposal should be concluded with an appropriate sentence, 2 marks will be awarded for linguistic ability.</p>

The Mid Term Assessments will be of 30 marks each.

Syllabus for the Mid Term Assessments

Mid Term Assessment	Month	Topics
First Mid Term	July	<ul style="list-style-type: none"> Proposal Feature Article Functional Grammar
Second Mid Term	December	<ul style="list-style-type: none"> Functional Grammar Comprehension

He who has imagination without learning has wings but no feet.
– Joseph Joubert

LITERATURE IN ENGLISH (Prescribed Texts) (801)

- Name of the Textbooks:**
1. Macbeth (Turner Edition)
 2. Prism: A Collection of ISC Short Stories
 3. Rhapsody: A Collection of ISC Poems
- Author:** 1. William Shakespeare
- Publishers:**
1. S. Chand
 2. Evergreen Publications (India) Ltd., New Delhi
 3. Evergreen Publications (India) Ltd., New Delhi

APRIL – SEPTEMBER	
Suggested Month	Name of the Chapter
April – May	PRISM – A Living God
	RHAPSODY – Abhisara – The Tryst
July	FIRST MID TERM ASSESSMENT
July – September	MACBETH
	Act I, Scenes I to VII
	PRISM – Advice to Youth
	RHAPSODY – Why I Like the Hospital
September	REVISION
September	HALF YEARLY EXAMINATION

OCTOBER – MARCH	
Suggested Month	Name of the Chapter
October - November	MACBETH
	Act II Scenes I to III
	PRISM – The Paper Menagerie
	RHAPSODY – Sonnet 116
December	SECOND MID TERM ASSESSMENT
December-January	MACBETH
	Act II Scene IV

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

	PRISM
	The Great Automatic Grammatizator
	Thank you Ma'am
	RHAPSODY
	Death of a Naturalist
	Strange Meeting
February	REVISION
February-March	ANNUAL EXAMINATION

Both Half-yearly and Annual Examination papers will be of 80 Marks.

Paper 2:

Theory: Prescribed Texts (3 hours) 80 Marks

There will be **two** papers in Literature in English:

Paper I: Theory (3 hours): 80 Marks

Paper II: Project Work

PAPER I: THEORY – 80 Marks

Candidates will be required to answer questions based on the prescribed textbooks, which include Drama, Prose (short stories) and Poetry.

LITERATURE PROJECT:

The candidates will be required to undertake written assignments, which are to be assessed internally by the teacher.

Note: Please refer to the Council Syllabus and Scope of the syllabus 2028 for the project topics and details.

The Mid Term Assessments will be of 30 marks each.

Syllabus for the Mid Term Assessments

Mid Term Assessment	Month	Topics
First Mid Term	July	<ul style="list-style-type: none"> PRISM – A Living God RHAPSODY – Abhisara – The Tryst
Second Mid Term	December	<ul style="list-style-type: none"> Macbeth Act II Scenes I & II RHAPSODY – Sonnet 116

He who has imagination without learning has wings but no feet.
– Joseph Joubert

ENGLISH LITERATURE (Modern English) (891)

- Name of the Textbooks:**
- PYGMALION** – MSB Publishers
 - PERSPECTIVES: A Collection of ISC Short Stories** – Evergreen Publishers
 - REFLECTIONS: A Collection of ISC Poems** – Evergreen Publishers

Author: 1. George Bernard Shaw

APRIL – SEPTEMBER	
Suggested Month	Name of the Chapter
April – May	PERSPECTIVES: A Collection of ISC Short Stories
	Lawley Road
	REFLECTIONS: A Collection of ISC Poems
	Father Returning Home
July	FIRST MID TERM ASSESSMENT
July – September	PYGMALION
	Act I
	PERSPECTIVES: A Collection of ISC Short Stories
	The Landlady
	REFLECTIONS: A Collection of ISC Poems
	Life Doesn't Frighten Me
September	REVISION
September	HALF YEARLY EXAMINATION

OCTOBER – MARCH	
Suggested Month	Name of the Chapter
October – November	PYGMALION
	Act II (Lines 1 – 740)
	PERSPECTIVES: A Collection of ISC Short Stories
	Most Beautiful
	REFLECTIONS: A Collection of ISC Poems
	Sadness Comes

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

December	SECOND MID TERM ASSESSMENT
December–February	PYGMALION
	ACT II (Continued)
	PERSPECTIVES: A Collection of ISC Short Stories
	Dream-Children: A Reverie
	Ratan Tata: A Life-Settling in at Cornell (An Excerpt)
	REFLECTIONS: A Collection of ISC Poems
	A Prayer for My Daughter
	Bora Ring
February	REVISION
February–March	ANNUAL EXAMINATION

Both Half-yearly and Annual Examination papers will be of 80 Marks.

Paper 2: Literature in English (Modern English)

Theory: Prescribed Texts (3 hours) 80 Marks

Internal Assessment:

There will be **two** papers in Literature in English:

Paper I: Theory (3 hours): 80 Marks

Paper II: Project Work

PAPER I: THEORY – 80 Marks

Candidates will be required to answer questions based on the prescribed textbooks, which include Drama, Prose (short stories) and Poetry.

LITERATURE PROJECT:

The candidates will be required to undertake written assignments, which are to be assessed internally by the teacher.

Note: Please refer to the Council Syllabus and Scope of the syllabus 2028 for the project topics and details.

The Mid Term Assessments will be of 30 marks each.

He who has imagination without learning has wings but no feet.
– Joseph Joubert

Syllabus for the Mid Term Assessments

Mid Term Assessment	Month	Topics
First Mid Term	July	<ul style="list-style-type: none"> • Perspectives - Lawley Road • Reflections - Father Returning Home
Second Mid Term	December	<ul style="list-style-type: none"> • Pygmalion - Act II (Lines 1 – 740) • Perspectives -Most Beautiful • Reflections –Sadness Comes

हिंदी

Name of Textbook	Author	Publication
1. सारा आकाश	: राजेन्द्र यादव	इंटर यूनिवर्सिटी प्रेस
2. गद्य संकलन	: ISC Collection of Short Stories & Essays	ऐवरग्रीन पब्लिकेशन्स
3. काव्य मंजरी	: ISC Collection of Poems	ऐवरग्रीन पब्लिकेशन्स
4. व्याकरण मंजूषा	: विनोदिनी शर्मा	इंटर यूनिवर्सिटी प्रेस

APRIL – SEPTEMBER			
Suggested Month	Chapter Number	Name of the Chapter	Page
April – July		काव्य मंजरी	
	1	साखी – (कबीरदास)	6
		गद्य संकलन	
	1	पुत्र प्रेम – (प्रेमचन्द)	6
	2	गौरी – (सुभद्रा कुमारी चौहान)	14
		सारा आकाश (अंक 1, 2)	
		परियोजना कार्य	
		व्याकरण – वाक्य संशोधन, मुहावरे, अपठित गद्यांश	
July		FIRST MID TERM ASSESSMENT	

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

August-September		काव्य मंजरी	
	2	बाल लीला – (सूरदास)	8
	3	एक फूल की चाह – (सियारामशरण गुप्त)	10
		गद्य संकलन	
	3	शरणागत – (वृन्दावन लाल वर्मा)	25
		सारा आकाश (अंक 3, 4, 5)	
		व्याकरण – मुहावरे, वाक्य संशोधन (मौखिक अभ्यास)	
		निबन्ध – विचारात्मक	
		पुनरावृत्ति	
September		HALF-YEARLY EXAMINATION	

OCTOBER – MARCH			
Suggested Month	Chapter Number	Name of the Chapter	Page
October		काव्य मंजरी	
	4	आ: धरती कितना देती है – (सुमित्रानन्दन पन्त)	15
		निबंध – वर्णनात्मक, सारा आकाश– (6,7)	
November		गद्य संकलन	
	4	सती – शिवानी	34
		व्याकरण–मुहावरे, वाक्य संशोधन (मौखिक अभ्यास)	
		काव्य मंजरी	
	5	नदी के द्वीप – (अज्ञेय) , सारा आकाश अंक–8	19
December		SECOND MID TERM ASSESSMENT	
		काव्य मंजरी	
	6	तुलसी के पद (तुलसीदास)	21

He who has imagination without learning has wings but no feet.
– Joseph Joubert

		सारा आकाश (अंक 9)	
		गद्य संकलन	
	5	आउट साइडर – (मालती जोशी)	44
January		निबन्ध – सूक्तिपरक (मौखिक)	
		गद्य संकलन	
	6	दासी – (जयशंकर प्रसाद),	54
		सारा आकाश अंक–10, सभी प्रकार के निबन्धों का अभ्यास (मौखिक)	
February		व्याकरण – वाक्य संशोधन, मुहावरे	
		पुनरावृत्ति	
February-March		ANNUAL EXAMINATION	

Syllabus for the Mid Term Assessments

Mid Term Assessment	Month	Topics
First Mid Term	July	गद्य संकलन – पुत्र प्रेम
		काव्य मंजरी – साखी – (कबीरदास)
		सारा आकाश – अंक 1 पूर्वार्द्ध, व्याकरण–मुहावरे, वाक्य संशोधन
Second Mid Term	December	काव्य मंजरी – आ: धरती कितना देती है
		गद्य संकलन – सती
		सारा आकाश – चरित्र चित्रण (मुख्य पात्रों के)
		व्याकरण – वाक्य संशोधन, मुहावरे

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

Internal Assessment (20 marks)

Assessment Criteria	Description
Listening Skills (Aural)	Response to questions based on listening comprehension
Speaking Skills (Oral)	Content, Fluency, Vocabulary, Sentence structure, Confidence level
Writing Skills	Process, Content, Presentation, Originality

Both half-yearly and annual examination papers will be of 80 marks.

There will be one paper of 3 hours duration, which will consist of two sections:		
1. Section A: Language	(40 marks)	
2. Section B: Prescribed Textbooks	(40 marks)	Total
3. Internal Assessment:	(20 marks)	40+40+20=100
Candidates will be required to answer four questions on at least three of the prescribed textbooks.		

Note: Please refer to the Council Syllabus and Scope of the syllabus 2028 for details.

Mid Term Assessment papers will be of 30 marks.

MATHEMATICS

Name of the Textbook: MATHEMATICS Textbook for Class XI

Publisher: NCERT

APRIL – SEPTEMBER		
Suggested Month	Topic Number	Name of the Topic
April-July	1(i)	Sets
	1(ii)	Relations and Functions
		Logarithms (To be taught in JJ section only)
	1(iii)	Trigonometry
July		FIRST MID TERM ASSESSMENT

He who has imagination without learning has wings but no feet.
– Joseph Joubert

July-September	2(i)	Complex Numbers
	2(ii)	Quadratic Equations and Inequalities
	2(v)	Sequence and Series
		Trigonometric Equations (To be taught in JJ section only)
	3(i)	Straight Lines
September		HALF-YEARLY EXAMINATION

OCTOBER – MARCH		
Suggested Month	Topic Number	Name of the Topic
October-November	3(ii)	Circles
	3(iv)	Introduction to Three Dimensional Geometry
	3(iii)	Conic Section
December		SECOND MID TERM ASSESSMENT
December-February	2(iii)	Permutations and Combinations
	2(iv)	Binomial Theorem
	5(i)	Statistics
	5(ii)	Probability
		REVISION
February-March		ANNUAL EXAMINATION

Note:

- Please refer to the Council Syllabus 2028 for details.
- There will be one paper of three hours duration carrying 80 marks (for Half-Yearly and Annual Examinations) and internal assessment of 20 marks.
- Syllabus for the Mid Term Assessments:
- **The Mid Term Assessments will be of 30 marks each.**

	Syllabus for 1 st Mid Term Assessment		Syllabus for 2 nd Mid Term Assessment
1.	Sets	1.	Circles
2.	Relations and Functions	2.	Introduction to three-dimensional Geometry

He who has imagination without learning has wings but no feet.
 Class XI – Joseph Joubert

APPLIED MATHEMATICS

Name of the Textbook: **MATHEMATICS Textbook for Class XI**
 Publisher: **NCERT**

APRIL – SEPTEMBER		
Suggested Month	Topic Number	Name of the Topic
April-May	1(i)	Sets
	1(ii)	Relations and Functions
June-July	1(iii)	Trigonometry
July		FIRST MID TERM ASSESSMENT
July-September	2(i)	Logarithm
	2(ii)	Complex Numbers
	2(iii)	Quadratic Equations and Inequalities
	2(v)	Binomial Theorem
	2(iv)	Permutations and Combinations
	5(v)	Probability
September		HALF-YEARLY EXAMINATION

OCTOBER – MARCH		
Suggested Month	Topic Number	Name of the Topic
October	2(vi)	Sequence and Series
October-November	6	Mathematical Reasoning
	5(i) – 5(iv)	Statistical Methods
December		SECOND MID TERM ASSESSMENT
December-January	3(i)	Straight Lines
	3(ii)	Circles
January-February	3(iii)	Parabola
	7	Financial Mathematics
February-March		ANNUAL EXAMINATION

He who has imagination without learning has wings but no feet.
 – Joseph Joubert

Note:

- Please refer to the Council Syllabus 2028 for details.
- There will be one paper of three hours duration carrying 80 marks (for Half-Yearly and Annual Examinations) and internal assessment of 20 marks.

The Mid Term Assessments will be of 30 marks each.

Syllabus for the Mid Term Assessments:

	First Mid Term Assessment		Second Mid Term Assessment
1.	Sets	1.	Sequence and Series
2.	Relations and Functions	2.	Statistical Methods

PHYSICS

Name of the textbook: **NCERT PHYSICS – Class XI**
 Publisher: **NCERT**

April – SEPTEMBER			
Suggested Month	Topic No.	Name of the Chapter	
April & May	1	Units and Measurements	1-7
	2	Motion in a Straight Line	13-17
July		FIRST MID-TERM ASSESSMENT	
July	3	Motion in a Plane	27-40
	4	Laws of Motion	49-64
August	4	Laws of Motion (continued)	
	5	Work, Power and Energy	71-83
September	6	System of Particles and Rotational Motion	92-120
September		HALF-YEARLY EXAMINATION	

OCTOBER – MARCH			
October	7	Gravitation	127-138
	8	Mechanical Properties of Solids	167-174
November	9	Mechanical Properties of Fluids	180-192
December	SECOND MID-TERM ASSESSMENT		
December	12	Kinetic Theory	244-254
	10	Thermal Properties of Matter	202-219
January	11	Thermodynamics	226-237
	13	Oscillations	259-270
February	14	Waves	278-293
February – March	ANNUAL EXAMINATION		

The Mid Term Assessments will be of 30 marks each.

	Syllabus for MT – 1		Syllabus for MT – 2	
Ch-1	Units and Measurements		Ch-8	Mechanical Properties of Solids
Ch-2	Motion in a Straight Line		Ch-9	Mechanical Properties of Fluids

PRACTICAL WORK
(According to ISC 2028 Syllabus)

The following experiments are recommended for practical work.

Suggested Month	Exp. No	Experiments
July	1	Measurement by Vernier Callipers. Measure the diameter of a spherical body. Calculate the volume with appropriate number of significant figures. Measure the volume using a graduated cylinder and compare it with calculated value.
	2	Find the diameter of a wire using a micrometer screw gauge and determine percentage error in cross sectional area.
	3	Determine the radius of curvature of a spherical surface like

		watch glass by a spherometer.
August	4	Equilibrium of three concurrent coplanar forces. To verify the law of parallelogram of forces and to determine the weight of a body.
	5	Inclined Plane: To find the downward force acting along the inclined plane on a roller due to gravitational pull of earth and to study its relationship with angle of inclination by plotting graph between force and $\sin\theta$.
September	6	Friction: To find the force of limiting friction for a wooden block placed on horizontal surface and to study its relationship with normal reaction. To determine the coefficient of friction.
HALF-YEARLY PRACTICAL EXAMINATION		
October – November		Searle's method to determine Young's modulus of elasticity. (Demonstration)
		Determination of the coefficient of viscosity of a given viscous liquid by terminal velocity method. (Demonstration)
		Capillary rise method to determine the surface tension of water. (Demonstration)
	7	Boyle's law: To study the variation in volume with pressure for a sample of air at constant temperature by plotting graphs between P and $1/V$ and between P and V.
December	8	To determine specific heat capacity of a solid using a calorimeter.
	9	Cooling curve: To study the relationship between falling temperature of a hot body (like hot water or any other liquid in a calorimeter) with time. Find the slope of curve at four different temperatures of hot body and hence deduce Newton's law of cooling.
	10	To find the acceleration due to gravity by measuring the variation in time period(T) with effective length(L) of simple pendulum, plot graph of T vs \sqrt{L} and T^2 vs L
January	11	To find the force constant of a spring and to study variation in time period of oscillation of a body suspended by the spring. To find acceleration due to gravity by plotting graph of T against \sqrt{m}
	12	To study the variation in frequency of air column with length using resonance column apparatus or a long cylinder and a

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

		set of tuning forks. Hence determine the velocity of sound in air at room temperature.
February	13	To determine frequency of a tuning fork using a sonometer.
ANNUAL PRACTICAL EXAMINATION		

There will be two papers in the subject.

Paper I:	Theory	3 hours	70 marks
Paper II:	Practical	3 hours	15 marks
	Project Work		10 marks
	Practical File		05 marks

BOTH HALF-YEARLY AND ANNUAL EXAMINATION PAPERS WILL BE OF 70 MARKS.

PROJECT WORK – 10 marks

All candidates will do project work involving some Physics related topics, under the guidance and regular supervision of the Physics teacher. Candidates are to prepare a technical report, formally written, including an abstract, some theoretical discussion, experimental setup, observations with table of data collected, analysis and discussion of results, deductions, conclusion, etc. (after the draft has been approved by the teacher). The report should be kept simple, but neat and elegant. No extra credit shall be given for type-written material/decorative cover, etc. Teachers may assign or students may choose any one project of their choice.

Practical File – 5 marks

Teachers are required to assess students on the basis of the physics practical file maintained by them during the academic year.

Note: You are advised to refer to the Council's syllabus 2028 for further details.

CHEMISTRY

Name of the textbook: NCERT CHEMISTRY A textbook of Class XI Part I, II

APRIL – SEPTEMBER		
Suggested Month	Topic Number	Name of the Chapter
April-June	2	Structure of Atom
	1	Some basic concepts of Chemistry

He who has imagination without learning has wings but no feet.
– Joseph Joubert

July		FIRST MID TERM ASSESSMENT
July	3	Classification of Elements and Periodicity in Properties
August	4	Chemical Bonding and Molecular Structure
	6	Equilibrium
September	8	Organic Chemistry: Some basic principles and techniques (excluding Isomerism and Mechanism)
		REVISION
September		HALF-YEARLY EXAMINATION

OCTOBER – MARCH		
October	8	Organic Chemistry: Some basic principles and techniques (Including Isomerism and Mechanism) (Complete topic)
November	7	Redox Reactions
December		SECOND MID TERM ASSESSMENT
December	5	Chemical Thermodynamics
January	9	Hydrocarbons (To be taught from NCERT in the JJ Section)
February		REVISION
February-March		ANNUAL EXAMINATION

List of Practicals		
July – September	1.	Titration
	2.	Preparation of Inorganic compounds
October – January	3	Qualitative Analysis: Identification of single salt containing one anion and one cation.
	4	Paper chromatography

Both Half-yearly and Annual Examination papers will be of 70 marks.

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

Note:

There will be **two** papers in the subject.

Paper I (Theory): Three hours (70 marks)

Paper II (Practical): Three hours (15 marks), project work (10 marks) and practical file (5 marks)

Refer to the Council Syllabus 2028 for details.

*** Note:**

- The Syllabus of the Jai Jagat (JJ) Section and the regular ISC Section will remain the same.
- The topic Hydrocarbons will be taught in the JJ Section from the NCERT Book only in Class XI.

The Mid Term Assessments will be of 30 marks each.

Syllabus for Mid Term Assessments:

Mid Term Assessments	Month	Chapter	Topics
First Mid Term	July	2	Structure of Atom
		1	Some basic concepts of Chemistry
Second Mid Term	December	7	Redox Reactions
		8	Organic Chemistry: Some basic principles and techniques (complete topic)

BIOLOGY

Name of the textbook: NCERT BIOLOGY A textbook of Class XI

APRIL – SEPTEMBER		
Suggested Month	Topic Number	Name of the Chapter
April-May	3 (i)	Cell – The Unit of Life
	3 (iii)	Cell Cycle and Cell Division
	1 (i)	The Living World

He who has imagination without learning has wings but no feet.
– Joseph Joubert

	1 (ii)	Biological Classification
July		FIRST MID TERM ASSESSMENT
July	1 (iv)	Animal Kingdom
	1 (iii)	Plant Kingdom
	3 (ii)	Biomolecules
August	2 (i)	Morphology of Flowering Plants
	2 (ii)	Anatomy of Flowering Plants
	2 (iii)	Structural Organization in Animals: Frog
September	2 (iii)	Structural Organization in Animals: Frog (Contd.)
	4 (ii)	Respiration in plants
		REVISION
September		HALF-YEARLY EXAMINATION

OCTOBER – MARCH		
October	4 (i)	Photosynthesis in Higher Plants
	4 (iii)	Plant Growth and Development
	5 (i)	Breathing and Exchange of Gases
November	5 (ii)	Body Fluids and Circulation
	5 (iii)	Excretory Products and Their Elimination
December		SECOND MID TERM ASSESSMENT
December	5 (iv)	Locomotion and Movement
	5 (v)	Neural Control and Co-ordination
January	5 (v)	Neural Control and Co-ordination (contd.)
	5 (vi)	Chemical Co-ordination and Integration
February		REVISION
February-March		ANNUAL EXAMINATION

List of Practicals

1. Scientific Techniques

Study parts of a dissecting microscope and compound microscope.

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

2. Physiology

- (i) Food tests: test for starch, glucose, sucrose, proteins and fats.
- (ii) To study the effect of thawing, heat and alcohol on permeability of beet root cells.
- (iii) Separation of plant pigments from leaves by chromatography.
- (iv) Effect of different carbon dioxide concentrations on the rate of photosynthesis.
- (v) Demonstration of plasmolysis (using *Rhoeo* leaf / onion bulb).
- (vi) Demonstration of osmosis in living plant cells (potato osmoscope)

3. Morphology

- (i) Study of morphology and modification of roots, stems and leaves.
- (ii) Preparation of temporary slides of *Mucor* / *Rhizopus*.

4. Cytology

Preparation of temporary slides of:

- (i) Onion peel(to study the plant cell)
- (ii) Stages of Mitosis in onion root tips
- (iii) T.S. of monocot and dicot stem
- (iv) T.S. of monocot and dicot root.

5. Spotting:

- (a) Identification of stained preparations of the following:
 - (i) Stages of meiosis
 - (ii) Mammalian blood cells
 - (iii) Bacteria
 - (iv) *Spirogyra*
 - (v) *Amoeba*
 - (vi) Yeast.
- (b) Identification of the following specimens:
 - (i) Liverworts
 - (ii) Moss
 - (iii) Fern
 - (iv) *Pinus*
 - (v) Mushroom
 - (vi) One monocot plant – Bamboo
 - (vii) One dicot plant – *Petunia*
 - (viii) Sponge
 - (ix) *Hydra*

He who has imagination without learning has wings but no feet.
– Joseph Joubert

- (x) Tape worm
- (xi) Leech
- (xii) Silk worm
- (xiii) Rohu fish.

- (c) Comment on experimental set up studied in physiology – Osmosis, Transpiration, Photosynthesis and Transpiration pull.

Both Half-Yearly and Annual Examination papers will be of 70 marks.

Note:

There will be **two** papers in the subject:

Paper I (Theory): Three hours (70 marks)

Paper II (Practical): Three hours (15 marks), project work (10 marks) and practical file (5 marks).

S. No.	Unit	Total Weightage (Marks)
1.	Diversity of Living Organisms	09
2.	Structural Organisation in Animals and Plants	11
3.	Cell: Structure and Function	15
4.	Plant Physiology	17
5.	Human Physiology	18
Total		70 Marks

Please refer to the revised Council Syllabus 2028 for details.

The Mid Term Assessments will be of 30 marks each.

Syllabus for Mid Term Assessments:

Mid Term Assessments	Month	Chapter	Topics
First Mid Term	July	3(i)	Cell – The Unit of Life
		3(iii)	Cell Cycle and cell division
Second Mid Term	December	1(i)	The Living World
		4(i)	Photosynthesis in Higher Plants
		5(ii)	Body Fluids and Circulation

ECONOMICS

**Name of the textbook: Indian Economic development
Statistics for Economics**

Publisher: NCERT

APRIL – SEPTEMBER		
Suggested Month	Unit Number	Name of the Unit
April – July	1	Understanding Economics
		(i) Definition of Economics
		(ii) Micro and Macro Economics
		(iii) Basic problems of an economy
		(iv) Types of economies
July		FIRST MID TERM ASSESSMENT
July-September	3	Statistics
		(i) Statistics: definition, scope and limitations of statistics
		(ii) Collection, Organization and presentation of data
		(iii) Measures of central value
		(vii) Some Mathematical tools used in Economics
	2	Indian economic development
		(ii) Parameters of development
		(vi) Economic growth and development
		Submission of Project work 1 and Revision
September		HALF YEARLY EXAMINATION

OCTOBER – MARCH		
October	2	Indian Economic Development
		(iii) Planning and Economic development in India
		(v) Current challenges facing the Indian economy Poverty

		vii) Sustainable development
November	2	Indian Economic Development
		(v) Current challenges facing the Indian economy – unemployment
	3	Statistics
		(iv) Measures of dispersion
December		SECOND MID TERM ASSESSMENT
		(v) Correlation
	2	Indian Economic Development
		(v) Current Challenges facing the Indian economy – Rural development and Human capital formation.
January	2	Indian economic development
		(i) Introduction – Indian economy post liberalization
		(iv) Structural changes in the Indian economy after Liberalization
	3	Statistics
		(vi) Index Number
February		Submission of Project work 2
		REVISION
February – March		ANNUAL EXAMINATION

Half-yearly and Annual examinations: **80 marks**

Mid Term Assessments: 30 marks each

Project work – 10 marks (One Project in each term)

Please refer to the Council Syllabus 2028 for details.

Note: Topics to be covered as per the scope of syllabus.

SYLLABUS FOR MID TERM ASSESSMENTS

FIRST MID TERM (JULY)		SECOND MID TERM (DECEMBER)	
1.	Understanding Economics	2.	Indian Economic Development
(i)	Definition of Economics	(v)	Current Challenges facing the Indian economy-Poverty
(ii)	Micro and Macro Economics	(vii)	Current Challenges facing the Indian economy - Unemployment
(iii)	Basic Problems of an Economy	3.	Statistics
		(iv)	Measures of Dispersion

BUSINESS STUDIES

Name of the textbook: **Business Studies – Class XI**

Publisher: **NCERT**

APRIL – SEPTEMBER		
Suggested Month	Unit	Unit / Sub Unit
April – May	1	Business: Purpose and Classification
	(i)	Meaning and Features of Business
	(ii)	Business Objectives
	(iii)	Classification of business activities
	(iv)	Business Ethics and Corporate Social Responsibility (Meaning only)
July		FIRST MID TERM ASSESSMENT
July	2	Forms and Types of Business Organisation
	(i)	Forms of Business Organisations
	(ii)	Types of Business Organisations under the Private Sector
	*	Sole Proprietorship

	(iii)	Partnership
August-September	(iv)	Corporate Organisations
	(a)	Joint Stock company
	(b)	Types of Companies
	(c)	Stages of formation of a company
	(d)	Promotion
	(e)	Incorporation of a company
	(f)	Memorandum of Association and Articles of Association
	(g)	Commencement of business
	(h)	Prospectus and Statement in lieu of Prospectus
	(i)	Global enterprises
	(vi)	Cooperative Organisations
		Submission of Project I
		REVISION
September	HALF-YEARLY EXAMINATION	

OCTOBER – MARCH		
October-November	3	Contemporary and Evolving Modes of Business
	(i)	E-Business
	(ii)	E-Commerce
	(iii)	E-Banking
	4	Domestic Trade
	(i)	Wholesale Trade
December		SECOND MID TERM ASSESSMENT
December	(ii)	Retail Trade
January	5	Business Risks and Insurance
	(i)	Risks in business
	(ii)	Insurance
	(iii)	Principles of Insurance

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

	(iv)	Concept of re-insurance and double-insurance
	(v)	Concept of assurance; Comparison between assurance and insurance
February	(vi)	Types of insurance
		Submission of Project 2
		REVISION
February- March		ANNUAL EXAMINATION

Half-yearly and Annual examinations: **80 marks**

Mid Term Assessments: 30 marks each

Project work – 10 marks (One Project in each term)

Please refer to the Council Syllabus 2028 for details.

Note: Topics to be covered as per the scope of syllabus.

Syllabus for the Mid Term Assessments

	Mid Term I		Mid Term II
(1)	Business: Purpose and Classification	(3)	Contemporary & Evolving Modes of Business
(i)	Meaning, features of business	(i)	E-Businesses
(ii)	Business Objectives	(ii)	E-Commerce
(iii)	Classification of Business Activities	(iii)	E-Banking
(iv)	Business Ethics & Corporate Responsibility	(4)	Domestic Trade
		(i)	Wholesale Trade

He who has imagination without learning has wings but no feet.
– Joseph Joubert

ACCOUNTS

Name of the textbook: Accounts

Publisher: NCERT

APRIL – SEPTEMBER	
Suggested Month	Name of the Chapter
April – May	Evolution of Accounting & Basic Accounting Terms
	Accounting Equations (excluding numerical)
	Meaning and Objectives of Accounting
	Double Entry System
	Generally Accepted Accounting Principles (GAAP)
	Capital and Revenue
	Basis of Accounting
July	FIRST MID TERM ASSESSMENT
July- September	Accounting for Goods & Service Tax (GST)
	Journal
	Cash Book
	Special purpose Subsidiary books
	Ledger
	Trial Balance
	Final Account (without Adjustments)
	Final A/c. (with adjustment) (continued)
	Project I
September	HALF-YEARLY EXAMINATION

OCTOBER – MARCH	
October	Accounting Standards (IFRS)
	Depreciation
November	Depreciation (Continued)

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

	Bank Reconciliation Statement
	Provisions and Reserves
December	SECOND MID TERM ASSESSMENT
	Bills of Exchange
	Errors and their Rectification
January	Accounts of Not-for-Profit Organisations
	Project II
February	REVISION
February- March	ANNUAL EXAMINATION

BOTH HALF-YEARLY AND ANNUAL EXAMINATION PAPERS WILL BE OF 80 MARKS.

There will be **two** papers in the subject.

Paper I – Theory – 3 hours 80 marks.

Paper II – Project Work 20 marks.

PAPER I (Theory) – 80 marks.

There will be one paper of three hours duration of 80 marks divided into **two** sections A and B. Both sections are compulsory. There are internal choices provided in each section.

Candidates will be expected to have completed two projects from any topic covered in theory but the topic should be from the scope of syllabus 2028.

Refer Council Syllabus 2028 for further details.

Mid Term Assessment papers will be of 30 marks each.

He who has imagination without learning has wings but no feet.
– Joseph Joubert

SYLLABUS FOR THE MID TERM ASSESSMENTS

Mid Term Assessment	Month	Topic
First Mid Term	July	Evolution of Accounting & Basic Accounting Terms
		Accounting Equations (excluding numerical)
		Meaning and Objectives of Accounting
		Double Entry System
		Generally Accepted Accounting Principles (GAAP)
		Capital and Revenue
		Basis of Accounting
Second Mid Term	December	Accounting Standards (IFRS)
		Depreciation
		Bank Reconciliation Statement
		Provisions and Reserves

COMPUTER SCIENCE

Name of the textbook: Understanding ISC Computer Science (Part I - Java) – XI
Understanding ISC Computer Science (Part II - Python) – XI
Author: V K Pandey & D K Dey
Publisher: Avichal Publishing Company

APRIL – SEPTEMBER			
Suggested Month	Chapter Number	Name of the Chapter	
April – May	1	System of Numeration	
	2	Encodings (including 1's and 2's Complement)	

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

	4	Introduction to Object Oriented Programming using Java	
	5	Objects (without Exception Handling)	
	6	Primitive Values, Wrapper classes, Types and Casting	
	7	Variables, Expressions	
	8	Statement and Scope (only conditional statements)	
	9	Methods and Constructors (without object passing)	
July		FIRST MID-TERM ASSESSMENT	
	8	Statements and Scope (Looping)	
August	10	Arrays, String (single and double dimension)	
September		Arrays, String (single and double dimension) (Continued...)	
		REVISION	
September		HALF-YEARLY EXAMINATION	

OCTOBER – MARCH			
October	9	Methods and Constructor (Object Passing)	
November	11	Basic Input / Output File Handling (only text file)	
	5	Objects (Exception Handling)	
December		SECOND MID-TERM ASSESSMENT	
December	12	Introduction to Python	
January	12	Introduction to Python (continued...)	
	3	Propositional Logic, Hardware Implementation, Arithmetical Operations	
February	13	Trends in Computing and Ethical Issues	
		REVISION	
February-March		ANNUAL EXAMINATION	

BOTH HALF-YEARLY AND ANNUAL EXAMINATION PAPERS WILL BE OF 70 MARKS.

He who has imagination without learning has wings but no feet.
– Joseph Joubert

Please refer to the Council Syllabus 2028.

There will be two papers in the subject:

Paper I: Theory 3 hours ... 70 marks

Paper II: Practical 3 hours ... 30 marks

For Paper II the break-up marks is:

Practical Exam: 10 marks

Mid term Assessment... 20 marks

PAPER I – THEORY

Paper I shall be of **3 hours** duration and be divided into two parts.

Part I (20 marks): This part will consist of compulsory MCQs and short answer questions, testing knowledge, application and skills relating to the entire syllabus.

Part II (50 marks): This part will be divided into three Sections A, B and C. Candidates are required to answer **two** questions out of **three** from Section A (each carrying **10 marks**) and **two** questions out of **three** from **Section B** (each carrying **10 marks**) and **two** questions out of **three** from **Section C** (each carrying **5 marks**). Therefore, a total of **six** questions are to be answered in Part II.

Note:

1. Algorithms may be done along with the programs.
2. Programs in the Mid-term assessments, Half-yearly and Annual Examination to be based on classes and objects including main.
3. **Programs on file handling and Python will be asked in Section C in the examinations.**
4. Refer to the latest Council Specimen paper on the Council's website (CISCE.org) for knowing the pattern of questions.

Mid Term Assessment papers will be of 30 marks each.

Mid Term Assessments	Month	Chapter number	Topic
First Mid Term	July	1	System of Numeration
		2	Encodings (including 1's and 2's Complement)
		4	Introduction to Object Oriented Programming using Java
		5	Objects (without Exception Handling)
		6	Primitive values, Wrapper classes, Types and Casting

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

		7	Variables, Expressions
		8	Statement and Scope (only conditional statements)
		9	Methods and Constructors (without object passing)
Topics covered before the First Mid-terms will be asked in First Mid-term Assessment			
Second Mid Term	December	9	Methods and Constructor (Object Passing)
		11	Basic Input / Output File Handling (only text file)
		5	Objects (Exception Handling)
All the topics taught before the Half-yearly examination (excluding “System of Numeration” and “Encodings”) will also be asked in the Second Mid-term Assessment but programs will be focused more on the topics prescribed after the Half-yearly examination.			

HISTORY

- Name of the textbooks:**
1. **Mastering Modern World History by Norman Lowe**
 2. **ISC History Class XI by S.N. Banerjee**
- Publishers:**
1. **Macmillan**
 2. **Kalyani Publishers**

APRIL – SEPTEMBER		
Suggested Month	Topic Number	Name of the Topic
April – May	1	Growth of Nationalism including Muslim League
	2	Emergence of the Colonial Economy
July		FIRST MID TERM ASSESSMENT
	7	The First World War 1914-1918
August	8	Peace settlements after the World War – I

He who has imagination without learning has wings but no feet.
– Joseph Joubert

	4	Protest Movements against Colonial Rule
September	9	The Great Depression: USA, Germany, Japan
		REVISION
September	HALF-YEARLY EXAMINATION	

OCTOBER – MARCH		
October	10	Rise of Nazism in Germany (1933 – 1939)
November	3	Economic, Social & Cultural impact of British Rule
December		SECOND MID TERM ASSESSMENT
	5	Gandhian Nationalism (1916 – 1937)
	13	Rise of Militarism in Japan (1919-1937)
January	11	Rise of Fascism in Italy (1919-39)
February	12	Rise of Communism in Russia
		REVISION
February-March	ANNUAL EXAMINATION	

BOTH HALF-YEARLY AND ANNUAL EXAMINATION PAPERS WILL BE OF 80 MARKS.

There will be two papers in the subject:

Paper I: Theory: 3 hours – 80 marks

Paper II: Project Work – 20 marks

Please refer to the Council Syllabus 2028 for details.

Syllabus for Mid Term Assessments:

Mid Term	Month	Chapter No.	Topics
First Mid Term	July	1	Growth of Nationalism including Muslim League
		2	Emergence of the Colonial Economy
Second Mid Term	December	10	Rise of Nazism in Germany (1933 – 1939)
		3	Economic, Social & Cultural impact of British Rule

Mid Term Assessment papers will be of 30 marks each.

He who has imagination without learning has wings but no feet.
 Class XI – Joseph Joubert

PSYCHOLOGY

Name of the Textbook: Psychology Textbook for Class XI
 Publisher: NCERT

APRIL – SEPTEMBER	
Suggested Month	Name of the Chapter / Topic
April – July	The Subject Psychology
July	FIRST MID TERM ASSESSMENT
August	Perception and Attention
September	Methods of Psychology
	REVISION
September	HALF-YEARLY EXAMINATION

OCTOBER – MARCH	
October	Learning
November	Emotions
December	SECOND MID TERM ASSESSMENT
December	Remembering and Forgetting
	Thinking, Reasoning, Problem Solving
January	Motivation
February	REVISION
February-March	ANNUAL EXAMINATION

Internal Assessment: Two studies to be undertaken on topics given in the Council Syllabus.

There will be **two** papers in the subject.

Paper I – Theory: 3 hours – **70 marks**

Mid Term Assessments: 30 Marks each.

Paper II – Practical Work – **10 marks**

He who has imagination without learning has wings but no feet.
 – Joseph Joubert

BOTH HALF-YEARLY AND ANNUAL EXAMINATION PAPERS WILL BE OF 70 MARKS.

Please refer to the Council syllabus 2028 for details.

Syllabus

Mid Term I – The Subject Psychology.

Mid Term II – Learning

Syllabus for the Mid Term Assessments:

Mid Term	Month	Topics
First Mid Term	July	The Subject Psychology
Second Mid Term	December	Learning

BIOTECHNOLOGY

Name of the textbook: **ISC Biotechnology**
 Author: **Tripathi, Saxena, Pandey**
 Publisher: **Nageen Prakashan Pvt. Ltd.**

APRIL – SEPTEMBER		
Suggested Month	Topic Number	Name of the Topic
April – July	1	Introduction to Biotechnology
	(i)	Historical Background
	(ii)	Scope and Importance of Biotechnology
	(iii)	Biochemical Technology and Biostatistics
	2	Cell Biology
	(i)	Cell –Basic unit of life
July		FIRST MID TERM ASSESSMENT

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

August-September	(ii)	Cell cycle, Cell division and Signal Transduction
	3	Biomolecules and Related Techniques
	(i)	Biomolecules
		REVISION
September	HALF-YEARLY EXAMINATION	

OCTOBER – MARCH		
October	3 (ii)	Techniques involved in Separation of Biomolecules
	(iii)	Immune System in Higher Animals
November-December	4	Genetics
	(i)	Laws of Inheritance
	(ii)	Gene Mapping
December	SECOND MID TERM ASSESSMENT	
January	5	Introduction to Cell Culture Technology
February		Introduction to Cell Culture Technology (continued)
		REVISION
February-March	ANNUAL EXAMINATION	

LIST OF PRACTICALS

1.	Determination of blood group by using anti sera
2.	Identification of different types of blood cells by preparing blood smear using Leishmann's stain
3.	Instruments – their names, use and principles.
4.	Finding out the Ph of water by using Ph meter or Ph paper on tap water and water containing acid, base.
5.	Observation of steps of mitosis by using root tip of onion

He who has imagination without learning has wings but no feet.
– Joseph Joubert

6.	Measurement of mitotic index.
7.	Observation of various stages of meiosis under microscope
8.	Effect of temperature on curdling of milk using <i>Lactobacillus</i> bacteria at 37°C, 60°C and 10°C
9.	Food tests – Carbohydrates, proteins and lipid.
10.	Finding out the purity of milk by using Lactometer.
11..	Preparation of Karyotypes
12.	Sampling methods – quadrat and transect by using different techniques.
13.	Data Collection and Analysis– Primary and Secondary.

BOTH HALF-YEARLY AND ANNUAL EXAMINATION PAPERS WILL BE OF 70 MARKS.

Note:

There will be two papers in the subject.

Paper I Theory: (Three hours) ... 70 marks

Paper II Practical: (Three hours) ... 15 marks, Project Work: 10 marks, Practical File: 5 marks

Please refer to the Council Syllabus 2028 for details.

Mid Term Assessment papers will be of 30 marks each.

Syllabus for Mid Term Assessments:

Mid Term Assessments	Month	Chapter	Topics
First Mid Term	July	1(i)	Historical Background
		1(ii)	Scope and Importance of Biotechnology
Second Mid Term	December	3(ii)	Techniques involved in Separation of Biomolecules
		3(iii)	Immune System in Higher Animals

GEOGRAPHY

Name of the textbook:	1. Fundamentals of Physical Geography Class XI (NCERT) 2. Fundamentals of Human Geography Class XII (NCERT) 3. Indian Physical Environment Class XI (NCERT) 4. India People & Economy Class XII (NCERT) 5. Practical Work in Geography I Class XI (NCERT) 6. Practical Work in Geography II Class XII (NCERT)
Publisher:	NCERT

APRIL – SEPTEMBER		
Suggested Month	Unit Number	Name of the topic
April – July	3	Changing Face of the Earth Landforms and Processes of Gradation (i) Endogenous processes (ii) Landforms (iii) Exogenetic process and associated landforms (iv) Fluvial processes and associated landforms (v) Aeolian processes and associated landforms (vi) Glacial processes and associated landforms (vii) Work of ground water and associated landforms. Water conservation (viii) Marine processes and associated landforms
		Map Work – Mountains, Plateaus
		Project as per the Council syllabus
July		FIRST MID TERM ASSESSMENT
August-September	2	Principles of Physical Geography Formation of the Earth (i) Theories of formation of the earth (ii) Methods of measuring age of the earth (iii) Structure and composition of the earth's interior (iv) Rocks
	5	The Realms of Water (i) Submarine relief of the Atlantic, Pacific and Indian Oceans (ii) Ocean water – Salinity, temperature and density (iii) Ocean water movements

		Map Work – Water bodies, Rivers, Islands, Ocean Currents
		1 Practical as per the Council syllabus
		REVISION
September		HALF-YEARLY EXAMINATION

OCTOBER – MARCH		
October-November	6	Biosphere – Life on the Earth (i) Nature of Biosphere, concept of ecosystems, components of ecosystem (ii) Biodiversity for sustenance of mankind (iii) India as a mega-diversity nation (iv) Strategies for conservation of biodiversity – in-situ and ex-situ
		Map work
December		SECOND MID TERM ASSESSMENT
December-February	4	Atmosphere (i) Composition and structure of Atmosphere (ii) Atmospheric Temperature (iii) Atmospheric Pressure (iv) Atmospheric Moisture (v) Climate Change
		Map Work
		1 Practical as per the Council syllabus
		REVISION
February-March		ANNUAL EXAMINATION

Map

Mountains (To mark and label): Himalayas, Hindukush, Elburz, Zagros, Kirthar, Caucasus, Alps, Pyrenees, Carpathians, Urals, Khingan, Kunlun, Drakensburg, Kjolen, Andes, Rockies, Appalachian, Great Dividing Range.

Plateaus (To mark and label): Tibetan, West Australian, Iranian, Anatolian, Pamirs, Ethiopian, Deccan, Guiana, Brazilian, Arabian.

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

Water Bodies (bays, gulfs, straits, sea, oceans) (To mark and label): Arctic Ocean, Atlantic Ocean, Indian Ocean, Pacific Ocean, Southern Ocean, Hudson bay, Gulf of Mexico, Bering Sea, Sea of Japan, South China Sea, Yellow Sea, Timor Sea, Persian Gulf, Red Sea, Black Sea, Mediterranean Sea, Caspian Sea, Arabian Sea, North Sea, Suez Canal, Strait of Magellan, Bay of Bengal.

Rivers (To identify): Mississippi, Amazon, Parana, Orange, Nile, Zaire, Rhine, Danube, Volga, Euphrates, Tigris, Ob, Yenisei, Lena, Hwang Ho, Yangtze Kiang, Irrawaddy, Ganga, Murray, Darling.

Ocean Currents (To identify): North Atlantic Drift, Gulf Stream, Labrador current, Peru current, West wind drift, Southwest Monsoon current, West Australian current, KuroShio current, Oyashio current, East Australian current.

Islands (To identify): Greenland, Hawaii, West Indies, Tierra del Fuego, Baffin, Newfoundland, Iceland, Madagascar, Sri Lanka, Philippines, Papua New Guinea, Indonesia, Japan, New Zealand.

BOTH HALF-YEARLY AND ANNUAL EXAMINATION PAPERS WILL BE OF 70 MARKS.

There will be **two** papers in the subject.

Paper I Theory: (Three hours) ... 70 marks

Paper II Practical and Project Work: ... 30 Marks

Please refer to the Council Syllabus 2028 for details.

SYLLABUS FOR MID TERM ASSESSMENTS

Term	Month	Chapter Number and Name
First Mid Term	July	Changing Face of the Earth Landforms and Processes of Gradation
		(iii) Exogenetic process and associated landforms (iv) Fluvial processes and associated landforms (v) Aeolian processes and associated landforms (vi) Glacial processes and associated landforms (vii) Work of ground water and associated

He who has imagination without learning has wings but no feet.
– Joseph Joubert

		landforms. Water conservation (viii) Marine processes and associated landforms
Second Mid Term	December	Biosphere – Life on the Earth (i) Nature of Biosphere, concept of ecosystems, components of ecosystem (ii) Biodiversity for sustenance of mankind (iii) India as a mega-diversity nation (iv) Strategies for conservation of biodiversity – in-situ and ex-situ

Mid Term Assessment papers will be of 30 marks each.

PHYSICAL EDUCATION

Name of the textbook: ISC Saraswati Physical Education for Class XI [Revised Edition 2025]
Author: Dr V K Sharma
Publisher: New Saraswati House (India) Private Limited

APRIL – SEPTEMBER			
Suggested Month	Chapter Number	Name of the Chapter	Page
April – May	1	Concept of Physical Education	3-24
		Any one game of your choice: Cricket, Football, Volleyball, Basketball and Badminton	
July		REVISION	
July		FIRST MID TERM ASSESSMENT	
July-September	2	Individual Aspects and Group Dynamics	25-38
	3	Effects of Physical Exercise on Human Body Systems	39-69
		Any two Games of your choice: Cricket, Football, Volleyball, Basketball and	

*He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert*

		Badminton	
		* Physical Efficiency Test	
		* Practical Assessment	
		REVISION	
September	HALF-YEARLY EXAMINATION		

OCTOBER – MARCH			
October- November	4	Nutrition, Weight Control and Exercise	70-104
	5	Physical Fitness and Wellness	105-134
		Any one game of your choice: Cricket, Football, Volleyball, Basketball and Badminton	
December	SECOND MID TERM ASSESSMENT		
December- February	6	Games and Sports - A Global Perspective	135-148
		Any two games of your choice: Cricket, Football, Volleyball, Basketball and Badminton	
		* Physical Efficiency Test	
		**Practical Assessment	
		REVISION	
February- March	ANNUAL EXAMINATION		

BOTH HALF-YEARLY AND ANNUAL EXAMINATION PAPERS WILL BE OF 70 MARKS.

There will be **two** papers in the subject.

Paper I: Theory: 3 hours ... 70 marks

Paper II: Internal Assessment ... 30 marks

Please refer to the Council Syllabus 2028 for details.

*He who has imagination without learning has wings but no feet.
– Joseph Joubert*

Syllabus for the Mid Term Assessments:

Mid Term	Month	Topics
First Mid Term	July	Chapter 1 - Concept of Physical Education Any one game of your choice: Cricket, Football, Volleyball, Basketball and Badminton
Second Mid Term	December	Chapter 4 - Nutrition, Weight Control and Exercise Chapter 5 - Physical Fitness and Wellness Any one game of your choice: Cricket, Football, Volleyball, Basketball and Badminton

Mid Term Assessment papers will be of 30 marks each.

SOCIOLOGY

Name of the Textbook: **Introducing Sociology – Class XI**
Textbook for Class XI
Understanding Society – Class XI

Publisher: **NCERT**

APRIL – SEPTEMBER		
Suggested Month	Chapter Number	Name of the Chapter
April – July	1	Origin and Development of Sociology and Anthropology
	2	Research Methodology
July	FIRST MID TERM ASSESSMENT	
August- September	3	Basic Concepts (i) Individual & Society (ii) Socialization (iii) Culture (iv) Social Problems (ALL) Child Labour, Juvenile Delinquency, Over population, Problems of Aged and Differently Abled
		REVISION
September	HALF YEARLY EXAMINATION	

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

OCTOBER – MARCH		
October	4	Social Structure
November		(i) Social Groups
		(ii) Status and Role
		(iii) Social process
December		SECOND MID TERM ASSESSMENT
January		(iii) Social process
	6	Indian Sociologists
February		REVISION
February-March		ANNUAL EXAMINATION

BOTH HALF-YEARLY AND ANNUAL EXAMINATION PAPERS WILL BE OF 70 MARKS.

There will be **two** papers in the subject:

Paper I – Theory: 3 hours ... 70 marks

Paper II – Practical Work ... 30 marks

Please refer to the Council Syllabus 2028 for details.

Mid Term Assessment papers will be of 30 marks each.

Syllabus for the Mid Term Assessments

Mid Term Assessment	Month	Topics
First Mid Term	July	<ul style="list-style-type: none"> Origin and Development of Sociology and Anthropology Research Methodology
Second Mid Term	December	<ul style="list-style-type: none"> Social Structure <ul style="list-style-type: none"> (i) Social Groups (ii) Status and Role (iii) Social process

He who has imagination without learning has wings but no feet.
 – Joseph Joubert

FASHION DESIGNING

Name of the textbook: Course of Fashion Design – Study Content
 Class XI

Author: Mrs. Shipra Anand

Publisher: Self Published by the Author

APRIL – SEPTEMBER		
Suggested Month	Chapter Number	Name of the Chapter
April – June		Module 1: Introduction to Fashion
	1	Definitions
	2	Classification of Fashion
	3	Fashion Life Cycle
	4	Careers in Fashion (A) The Apparel Industry Setup (B) Careers in Fashion
	5	Fashion Terminology
July		FIRST MID TERM ASSESSMENT
July	6	Fashion and Current Trends
August – September		Module 2: Design Details
	1	Types of Design
	2	Elements of Design
	3	Principles of Design
September		REVISION
September		HALF-YEARLY EXAMINATION

OCTOBER – MARCH		
October		Module 3: Wardrobe Planning
	1	Different Figure Types
	2	Buying Fabrics
	3	Clothing as a Powerful Resource

*He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert*

November		Module 4: Designers
	1	Indian Designers
	2	International Designers
December		SECOND MID TERM ASSESSMENT
December-January		Module 5: Care of Clothes
	1	Common Stains and their Removal
	2	Stain Removal Methods
	3	Storage and Maintenance of Clothes
	4	Principles of Closet Organization
February		REVISION
February-March		ANNUAL EXAMINATION

LIST OF PRACTICALS

1.	Hand Embroidery stitches
2.	Cutting & finishing techniques
3.	Basic Illustration
4.	Taking Measurements
5.	Accessory Making workshop

BOTH HALF-YEARLY AND ANNUAL EXAMINATION PAPERS WILL BE OF 70 MARKS.

There will be two papers in the subject.

Paper I: Theory: 3 hours ... [70 Marks]

Paper II: Practical [30 Marks], File – [15 Marks]

Continuous Assessment – [15 Marks] (Unit Test)

Please refer to the Council Syllabus 2028 for details.

Mid Term Assessment papers will be of 30 marks each.

*He who has imagination without learning has wings but no feet.
– Joseph Joubert*

Syllabus for the Mid Term Assessments

Mid Term Assessments	Month	Topics
First Mid Term	July	Module 1: Introduction to Fashion
		1. Definitions
		2. Classification of Fashion
		3. Fashion Life Cycle
		4. Careers in Fashion (A) The Apparel Industry Setup (B) Careers in Fashion
		5. Fashion Terminology
Second Mid Term	December	Module 3: Wardrobe Planning
		1. Different Figure Types
		2. Buying Fabrics
		3. Clothing as a Powerful Resource
		Module 4: Designers
		1. Indian Designers
		2. International Designers

He who has imagination without learning has wings but no feet.
 Class XI – Joseph Joubert

POLITICAL SCIENCE

Name of the textbook: Political Science (Political Theory and Contemporary Relations)

Author: K K Ghai

Publisher: Kalyani Publishers

APRIL – SEPTEMBER		
Suggested Month	Chapter Number	Name of the Chapter
April - May	1	Introduction to Political Science
	2	Fundamental Concepts
	4	Political Ideologies: Liberalism, Socialism, Communism and Fascism
	8	Equality
	10	End of Cold War and its Impact on the World Order
July		FIRST MID TERM ASSESSMENT
August	11	Unipolar World
	13	South Asia
September		HALF-YEARLY EXAMINATION

OCTOBER – MARCH		
October	3	The Origin of the State
November	5	Sovereignty
	6	Law
	7	Liberty
	9	Justice
December		SECOND MID TERM ASSESSMENT
January	12	Regional Cooperation: ASEAN & European Union
February		REVISION
February-March		ANNUAL EXAMINATION

He who has imagination without learning has wings but no feet.
 – Joseph Joubert

BOTH HALF-YEARLY AND ANNUAL EXAMINATION PAPERS WILL BE OF 80 MARKS.

Note:

There will be **two** papers in the subject:

Paper I: Theory: 3 hours ... 80 marks;

Paper II: Project Work (20 marks)

Please refer to the Council Syllabus 2028 for details.

Syllabus for the Mid Term Assessments

Mid Term Assessments	Month	Topics
First Mid Term	July	Introduction to Political Science
		Fundamental Concepts
		Political Ideologies: Liberalism, Socialism, Communism and Fascism
		Equality
		End of Cold War and its Impact on the World Order
Second Mid Term	December	The Origin of the State
		Sovereignty
		Law
		Liberty
		Justice

Mid Term Assessment papers will be of 30 marks each.

*He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert*

LEGAL STUDIES

ISC Textbook of Legal Studies - XI

APRIL – SEPTEMBER		
Suggested Month	Chapter Number	Name of the Chapter
April - May	Unit-1	Indian Constitution
	Unit-3	Law of Civil Procedure and Consumer Protection
July		FIRST MID TERM ASSESSMENT
July-September	Unit-2	Jurisprudence
	Unit-4	Cyber Crime
September	REVISION	
September	HALF-YEARLY EXAMINATION	

OCTOBER – MARCH		
October-November	Unit-5	Family Law
	Unit-7	BNSS
December		SECOND MID TERM ASSESSMENT
December-February	Unit-7	BNSS (continued)
	Unit-6	Intellectual Property Law
February-March	ANNUAL EXAMINATION	

BOTH HALF-YEARLY AND ANNUAL EXAMINATION PAPERS WILL BE OF 70 MARKS.

There will be **two** papers in the subject:

Paper I – Theory: 3 hours – (70 marks)

Paper II – Project Work – (30 marks)

*He who has imagination without learning has wings but no feet.
– Joseph Joubert*

Please refer to the Council Syllabus 2028 for details.

Mid Term Assessment papers will be of 30 marks each.

Syllabus for Mid Term Assessments:

Mid Term Assessments	Month	Topics
First Mid Term	July	Indian Constitution
		Law of Civil Procedure and Consumer Protection
Second Mid Term	December	Family Law
		BNSS

MASS MEDIA AND COMMUNICATION

APRIL – SEPTEMBER	
Month	Name of the Topic
April	Communication
May	Communication
July	Basics of Journalism
July	FIRST MID TERM ASSESSMENT
August	Radio Programs
September	Revision
September	HALF-YEARLY EXAMINATION
	OCTOBER – MARCH
October	Programmes for TV
November	Public Relation
December	SECOND MID TERM ASSESSMENT
December-January	Media Regulatory Bodies
January	Revision
February-March	ANNUAL EXAMINATION

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

BOTH HALF-YEARLY AND ANNUAL EXAMINATION PAPERS WILL BE OF 70 MARKS.

Please refer to the CISCE Syllabus 2028 for details.

Note: Topics to be covered as per the Scope of Syllabus.

Mid Term Assessment papers will be of 30 marks each.

Syllabus for Mid Term Assessments:

Mid Term Assessments	Month	Topics
First Mid Term	July	<ul style="list-style-type: none"> • Communication
		<ul style="list-style-type: none"> • Basics of Journalism
Second Mid Term	December	<ul style="list-style-type: none"> • Programmes for TV
		<ul style="list-style-type: none"> • Public Relation

ROBOTICS

Name of the Textbook: Robotics Class XI

Author: T D Malhotra

Publisher: Kalyani Publishers

Distribution of topics done as per the Regulations and Syllabus of the Council

APRIL – SEPTEMBER	
Suggested Month	Name of the Chapter
April - May	INTRODUCTION TO ROBOTICS
	What is a Robot?, New age Robotic Systems, Components of Robot
July	FIRST MID TERM ASSESSMENT
July	Relating Physics and Mathematics to Robotics, Project Management
August	MECHANICAL SYSTEM

He who has imagination without learning has wings but no feet.
– Joseph Joubert

	Frames and Reference Frames, DOF (Degree of Freedom)
September	Planar & Spatial Mechanism
	REVISION
September	HALF-YEARLY EXAMINATION

OCTOBER – MARCH	
October	Robot Kinematics, Component of Robot, Coordinate System
November	Specification of Robot
	Computing System
	Boolean operators (AND, OR, NOT)
December	SECOND MID TERM ASSESSMENT
December	Microcontroller / SBC Architecture and Programming Fundamentals, Debugging & Testing
	Electrical And Control Systems - Motors and Sensor
January	Batteries, Communication Protocol, Power Requirement, Control System.
	Applications Of Robotic Systems: Manipulators
February	Mobile Robots and Drones
	REVISION
February-March	ANNUAL EXAMINATION

Note:

1. Topics covered till the 1st MID TERM will be asked in the First Mid Term Assessment.
2. In the Second Mid Term Assessment syllabus will be after Half Yearly and Before 2nd Mid Term Assessment.

Please refer to the Council Syllabus 2028.

There will be **two** papers in the subject:

Paper I: Theory 3 hours - 70 marks

Paper II: Practical 3 hours - 30 marks

He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert

As per the Council Syllabus 2028 students are supposed to maintain the practical assignments (minimum of 20 assignments) in the form of a work file and also do a project work (based on any topic from the syllabus).

SYLLABUS FOR THE MID TERM ASSESSMENTS:

Mid Term Assessments	Month	Topics
First Mid Term	July	What is a Robot?, New age Robotic Systems, Components of Robot
Second Mid Term	December	Robot Kinematics, Component of Robot, Coordinate System
		Specification of Robot
		Computing System
		Boolean operators (AND, OR, NOT)

Distribution of Marks for Half-Yearly Examination

Component	Maximum Marks	Weightage / Marks Considered
Examination	70	70
Practical Examination	10	5
Viva	10	5
Mid-term Assessment	30	20
Total	—	100

Distribution of Marks for Annual Examination

Component	Maximum Marks	Weightage / Marks Considered
Examination	70	70
Project	10	5
Practical Examination + Viva	5+5	5
Mid-term Assessment	30	20
Total	—	100

Mid Term Assessment papers will be of 30 marks each.

He who has imagination without learning has wings but no feet.
– Joseph Joubert

ARTIFICIAL INTELLIGENCE

Name of the Textbook: Artificial Intelligence Class XI

Author: T D Malhotra

Publisher: Kalyani Publishers

APRIL – SEPTEMBER	
Suggested Month	Name of the Chapter
April - May	Unit – I
	Basic Concepts of Artificial Intelligence
	(i) Artificial Intelligence
	(ii) Role of data and information
	(iii) Overview of Decision making
	(iv) Components of AI project framework
	(v) Overview of Data representation and programming in Python
	REVISION
July	FIRST MID TERM ASSESSMENT
	Unit – III
	Mathematics for AI
	(i) Matrices
	(ii) Vectors and its applications
	Unit – II
	Introduction and State of Art of AI, NLP and Potential use of AI
	(i) Brief History and Primary elements of AI
	(ii) Domain of NLP
	(iii) Potential use of AI
	(iv) AI and Society
August	Unit – III
	Mathematics of AI

**He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert**

	(iii) Set Theory
	(iv) Simple Statistical Concepts
	Unit – IV
	Data Visualization
	(i) Data Visualization using Python Programming
September	Unit – VII
	Ethical Practices in AI
	REVISION
September	HALF-YEARLY EXAMINATION

OCTOBER – MARCH	
October	Unit IV
	Data Visualization
	(ii) Data Visualization using Statistical Graphs
	(iii) Introduction to Dimensionality of Data
November	Unit V
	Theoretical and Practical Aspects of Data Processing
	(i) Introduction to Data Cleaning
	(ii) Exploring Kaggle Datasets
	(iii) Data Transformation and Standardization
	REVISION
December	SECOND MID TERM ASSESSMENT
December	Unit VI
	Data Modeling, Simple Linear Regression
	(i) Introduction to Data Modeling
January	(ii) Regression Analysis
	(iii) Linear Regression Equation
	(iv) Solving Linear Equations

**He who has imagination without learning has wings but no feet.
– Joseph Joubert**

	REVISION
February- March	ANNUAL EXAMINATION

Please refer to the Council Syllabus 2028.

There will be **two** papers in the subject:

Paper I: Theory 3 hours - 70 marks

Paper II: Practical 3 hours - 30 marks

For Paper II the break-up of marks is:

Practical Examination: 10 marks

As per the Council Syllabus 2028 students are supposed to maintain the practical assignments (minimum 20 assignments) in the form of a work file and also do a project work (based on any topic from the syllabus).

Mid Term Assessment papers will be of 30 marks each.

SYLLABUS FOR THE MID TERM ASSESSMENTS:

Mid Term Assessments	Month	Topics
First Mid Term	July	Basic Concepts of Artificial Intelligence
		(i) Artificial Intelligence
		(ii) Role of data and information
		(iii) Overview of Decision making
		(iv) Components of AI project framework
		(v) Overview of Data representation and programming in Python
Second Mid Term	December	Unit IV
		Data Visualization
		(ii) Data Visualization using Statistical Graphs
		(iii) Introduction to Dimensionality of Data
		Unit V
		Theoretical and Practical Aspects of Data Processing

*He who has imagination without learning has wings but no feet.
Class XI – Joseph Joubert*

	(i) Introduction to Data Cleaning
	(ii) Exploring Kaggle Datasets
	(iii) Data Transformation and Standardization

Distribution of Marks for Half-Yearly Examination

Component	Maximum Marks	Weightage / Marks Considered
Examination	70	70
Practical Examination	10	5
Viva	10	5
Mid-term Assessment	30	20
Total	—	100

Distribution of Marks for Annual Examination

Component	Maximum Marks	Weightage / Marks Considered
Examination	70	70
Project	10	5
Practical Examination + Viva	5+5	5
Mid-term Assessment	30	20
Total	—	100

*He who has imagination without learning has wings but no feet.
– Joseph Joubert*

ENVIRONMENTAL SCIENCE

Name of the Textbook: ISC Environmental Science – Class XI

Author: Dr Nirmal Kapoor

Publisher: As prescribed by CISCE

Suggested Month	Chapter Number	Name of the Chapter
April–May	1	Modes of Existence
	2	Ecology
July		FIRST MID TERM ASSESSMENT
July–August	3	Pollution
September		REVISION
September		HALF-YEARLY EXAMINATION
October	4	Legal Regimes for Sustainable Development
November	5	Technology and Environment
December		SECOND MID TERM ASSESSMENT
December	6	Design and Planning for Environmental Conservation
January		Model Test Papers (Solved)
February		REVISION
February–March		ANNUAL EXAMINATION

BOTH HALF-YEARLY AND ANNUAL EXAMINATION PAPERS WILL BE OF 70 MARKS.

Note:

There will be Theory Paper & Project in the subject.

Theory 3 hours 70 marks

Project Work 30 marks

Please refer to the council syllabus 2028 for details.

Mid Term Assessment papers will be of 30 marks each.