

XAVIER SCHOOL GAMHARIA
Syllabus for the Academic session (2023-24)
Class- XI (SCIENCE)

Subject: Chemistry
Name of book: ISC Chemistry, class XI(Nageen Prakashan)

EXAM	CHAPTERS	PROJECT	ACTIVITY	
1 st Unit	1. Some basic concept of chemistry.			12
1 st Semester	2. Structure of atom			14
	3. Classification of elements & periodicity in properties 8. Redox reaction 9. Hydrogen 12. Organic chemistry : GOC 13. Hydro Carbons	Lab manual(5 marks) + practical exam (15 marks)	Making of soap ,nail paint ,lip balm ,chalk etc.	8 6 8 14 12
2 nd Unit	4 chemical bonding and molecular structure 5. States of matter: gases and liquids			14 12
2 nd semester	6. Chemical thermodynamics 7. equilibrium 10. S block elements 11. P block elements 14. environmental chemistry	Lab manual(5 marks) + practical exam (15 marks)		16 14 10 14 06

Subject - Physics

BOOK: NOOTAN ISC PHYSICS

EXAM	CHAPTERS	PROJECTS/ASSIGNMENTS
1 st UNIT TEST (20 marks)	Ch-1: Physical World and Measurement Ch-2: Kinematics	
1 st SEMESTER (70 marks)	Ch-3: Laws of Motion Ch-4: Work, Energy and Power Ch-5: Motion of System of Particles and Rigid Body (Including ch-1 & 2)	Practical done during the session. (Practical-15 marks Lab manual-5 marks)
2 nd UNIT TEST (20 marks)	Ch-6: Gravitation Ch-7: Properties of Bulk Matter	
2 nd SEMESTER (70 marks)	Ch-8: Heat and Thermodynamics	Practical done during the session.

	Ch-9: Behaviour of Perfect Gases and Kinetic Theory of gases Ch-10: Oscillations and Waves (Including ch-1 to 7)	(Practical-15 marks Lab manual-5 marks)
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SUBJECT: BIOLOGY

NAME OF THE BOOK: ISC BIOLOGY

EXAM	CHAPTER	PROJECT	ACTIVITY
1ST Unit - 20 marks	Chp-2 Biological classification		
1st Semester – 70 marks	Chp-2 Biological classification Chp-3 Plant Kingdom Chp-4 Animal Kingdom Chp-5 Morphology of Flowering Plants Chp-6 Anatomy of Flowering Plants Chp-7 Animal Tissues, Morphology and Anatomy of Cockroaches Chp-8 Cell: Unit of Life Chp-9 Biomolecules Chp-10 Cell Cycle and Cell Division Chp-11 Transport in plants	<i>Any topic within the scope of the syllabus.</i>	<i>Lab work to be done.</i>
Practical Exams- 15 marks	Practicals done during the semester.		
2nd Unit - 20 marks	Chp-12 Mineral Nutrition Chp-13 Photosynthesis in Higher plants		
2nd Semester- 70 marks	Chp-14 Respiration in Plants Chp-15 Plant Growth and Development Chp-16 Digestion and Absorption Chp-17 Breathing and Exchange of gases Chp-18 Body Fluids and Circulation Chp-19 Excretory products and their function Chp-20 Locomotion and Movement Chp-21 Neural Control and Coordination Chp-22 Chemical Co-ordination and Integration		<i>Lab work to be done.</i>
Practical Exams- 15 marks	Practicals done during the session.		

Distribution of marks for both the semester- Internal assessment-30 marks {unit test(20 marks)/2+practical exam(15 marks)+lab manual(5 marks)} + **Theory exam-70 marks**

Note: All the chapters of first semester are also included in second semester examination along with second semester portion. Second semester question paper to be sent by CISCE.

Subject :- Mathematics

Name of the book :- Understanding ISC Mathematics

EXAM	CHAPTERS	PROJECT	ACTIVITY
1st Unit	Chapter 5 Complex number Chapter- 1 Sets		
1st Semester	Chapter 5 Complex Number Chapter 1 Sets Chapter 2 Relation And Function Chapter 3 Trigonometry Chapter 10 Sequences and Series Chapter 14 Statistics Chapter 6 Quadratic Equation Chapter 7 Linear and Quadratic Inequalities Chapter 4 Principle of Mathematical Induction	Using a Venn diagram, find the number of subsets of a given set and verify that if a set has 'n' number of elements, the total number of subsets is 2^n .	To plot graphs of $\sin x$ and $\sin 2x$
2nd Unit	Chapter 9 Binomial Theorem Chapter 15 Probability		
2nd Semester	Chapter 9 Binomial Theorem Chapter 15 Probability Chapter 8 Permutations and Combinations Chapter 11	Write geometrical significance of X coordinate, Y coordinate, and Z coordinate in space. Using the above, find the distance of the point in space from x-axis/y-axis/z-axis. Explain the above using a three-dimensional model/ power point presentation.	To Construct an ellipse using a rectangle

	Straight Lines Chapter 12 Circles Chapter 13 Limits And Derivatives Section B Chapter 1 Conic Section Chapter 2 Introduction To Three Dimensional Geometry Chapter 3 Mathematical Reasoning		
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Subject: – Computer Science

NAME OF THE BOOK: - UNDERSTANDING ISC COMPUTER SCIENCE

EXAM	CHAPTERS	PROJECT/ACTIVITY
1 st Unit	Chapter – 1 Number System Chapter – 4 Introduction to Java Language Chapter – 5 Concept of Data types Chapter – 6 Operators & Expressions Chapter – 7 Conditional & Looping Statement	Program Based On Numbers and Conversion Of One Number System To Another Number System. Program Based On Numbers and Date in java.
1 st Semester	Chapter – 8 Methods & Constructor Chapter – 12 Recursion	Program Based On Function, constructor and recursion in java.
2 nd Unit	Chapter – 2 Encodings Chapter – 3 Propositional Logic & Hardware Chapter – 14 Packages Chapter – 10 Arrays SDA / DDA	Program Based On Arrays (S.D.A And D.D.A)
2 nd Semester	Chapter – 09 Character Handling and String Manipulation Chapter – 13 Implementation of Algorithm to solve problems Chapter – 11 Input/output Data File Handling Chapter – 15	Program Based On character and String manipulation.

	Trends in Computing and Ethical Issues	Program Based On File Handling.
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EXAM PATTERN

Exam / Assignment / Project	Marks	Converted Marks	Final Marks
Unit Test	20	10	30
Lab Manual	5	5	
Lab Test	15	15	
Semester Exam	70	70	70
Total			100

Subject – English Literature

Name of book: 1. Drama: Macbeth – William Shakespeare

2. Prism: A collection of ISC short stories

3. RHAPSODY: A collection of ISC poems

Exam	Portion	Project/Activity
1 st Unit	Poem 1: Abhisara: The Tryst Prose 1: A Living God Macbeth: Act I, Scene 1,2	Project: Explain the ‘weird sisters’ and comment on the part played by them in the play
1 st Semester	Prose 2: Advice To Youth Prose 3: The Paper Menagerie Poem 2: Why I Like The Hospital Poem3: Sonnet 116 Macbeth: Scene 3,4	
2 nd Unit	Poem 4: Death Of A Naturalist Prose 4: The Great Automatic Grammatizator Macbeth: Scene 5,6,7	Activity: Speak for around 2 mins on ‘The main theme in the play Macbeth’.
2 nd Semester	Poem- 1 to 5 Prose- 1 to 5 Macbeth: Act 1 and 2	

SUBJECT: ENGLISH LANGUAGE

Aims (English Language)

To develop the ability to:

- derive, infer and critically assess information through listening.
- express oneself by speaking individually, or in a discussion.
- read with comprehension drawing information directly or by inference from the text, through an understanding of grammar and structure, vocabulary and idiom.
- employ a variety of skills in writing: within a framework, using argument or imagination or summarizing.
- use the English language for the purpose of study and social and cultural interaction.
- Speak and write clearly and to the purpose, using appropriate grammar, vocabulary and idiom
- use the English language for the purpose of stud

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

Paper 1: English Language (3 hours)

Question One: A composition on one of a number of subjects. **... 20 Marks**

Question Two:(a) Directed writing (article writing, book review, film review, review of cultural programme, speech writing, report writing, personal profile, and statement of purpose) based on suggested points. **...15 Marks**

(b) Proposal Writing based on a given situation. The proposal should include (i) The Heading (ii) Statement of Objective (iii) List of measures. **...10 Marks**

Question Three: Short-answer questions to test grammar, structure and usage. **...15 Marks**

Question Four: Comprehension. **...20 Marks**

It is recommended that in Paper 1, about 45 minutes should be spent on Question one, 55 minutes on Question two, 30 minutes on Question three and 50 minutes on Question four.

Question One

Candidates will be required to select **one** composition

topic from a choice of **six**. The choice will normally include narrative, descriptive, reflective, argumentative, discussion topics and short story.

The required length of the composition is **400 – 450** words.

The main criteria by which the compositions will be marked are as follows:

- (a) The quality of the language employed, the range and appropriateness of vocabulary and sentence structure, syntax, the correctness of grammatical constructions, punctuation and spelling.
- (b) The degree to which candidates have been successful in organising the content of the composition as a whole and in individual paragraphs.

Question Two

There are **two** parts in this question and it is emphasized both parts are compulsory.

- (a) The piece of directed writing will be based on the information and ideas provided. The required length will be about 300 words. The range of subjects may include article writing, book review, film review, review of cultural programme, speech writing, report writing, personal profile, and statement of purpose.

Skills such as selecting, amplifying, describing, presenting reasoned arguments, re-arranging and re-stating may be involved. The candidates' ability in the above skills, including format will be taken into account as well as their ability to handle language appropriately in the context of the given situation.

- (b) Candidates will be required to write a proposal based on a given situation. The candidate's ability to decide on the set of measures to be taken in a given situation will be taken into account. A heading and an objective must be stated.

Question Three

All the items in this question are compulsory, and their number and type / pattern may vary from year to year. They will consist of short-answer, open completion items or any other type, which will test the candidates' knowledge of the essentials of functional English grammar and structure. Only two or three types will be included in any one examination.

Project Topics(any one)

1. The text of a brochure
2. A product description
3. Description of a process – Ex. Description of how to operate a device, cook a dish or conduct a scientific experiment
4. A description of a sporting event- Ex. A description of a cricket match
5. An autobiographical experience-Ex. The day I learnt the lesson of punctuality
6. A review of a T.V. serial- Ex. A review-favourable or unfavourable of any T.V. serial

Question Four

A passage of about 500 words will be provided.

Questions based on the passage will be as follows:

- Questions that test the candidates' knowledge of vocabulary and ability to understand the content of and infer information and meanings from the text.
- A question that elicits the main ideas of all or part of the passage.

In this part of the question, the candidate will be required to frame a summary (keeping to a word limit), in a coherent manner. Marks will be awarded for expression and the candidate's ability to summarise clearly in complete sentences. Marks will be deducted for linguistic errors.

It is recommended that this part be done in the grid form.

Use of abbreviations will not be accepted.

All questions are compulsory.

