



Usha Martin School, Malda
Session:-2025-26
Class:-XII SCIENCE syllabus

Examination Name	Subject	Content
PT-1	ENGLISH	<u>FLAMINGO</u> 1. The Last Lesson 2. Lost Spring 3. The Rat Trap 4. Aunt Jennifer's Tigers 5. My Mother at Sixty Six
		<u>VISTAS</u> 1. The Third Level 2. The Tiger King
		<u>WRITING</u> 1. Notice 2. Articles
	PHYSICS	Ch 1: Electric charge and field
		Ch 2: Electric potential and capacitance
		Ch 3: current electricity
	CHEMISTRY	BOOK : 1. NCERT CHEMISTRY PART (PART I + PART II) 2. MODERN'S abc+ CHEMISTRY (PART I + PART 2)
		UNIT : 1 Solutions
		UNIT : 5 Coordination Compounds
		UNIT : 6 Haloalkanes and Haloarenes
		UNIT : 4 The d- and f- block Elements

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PT-1

	MATHEMATICS	<u>NCERT MATHEMATICS</u> 1. Integrals (First Four Exercise) 2. Matrices 3. Determinants 4. Relations And Functions 5. Inverse Trigonometric Functions
	APPLIED MATHEMATICS	1. Numbers & Quantification (Modulo Arithmetic,Congruence Modulo,Alligation and Mixture,Numerical Problems,Boats and Streams (upstream and downstream),Pipes and Cisterns,Races and Games,Numerical Inequalities) 2. ALGEBRA (Matrices and types of matrices ,Equality of matrices, Transpose of a matrix, Symmetric and Skew symmetric matrix,Algebra of Matrices,Determinants,Inverse of a matrix,Solving system of simultaneous equations using matrix method and Cramer's rule) 3. PROBABILITY DISTRIBUTIONS (Probability Distribution,Mathematical Expectation,Variance Binomial Distribution,Poisson Distribution,Normal Distribution)
	COMPUTER SCIENCE	<u>BOOK:- COMPUTER SCIENCE WITH PYTHON (SUMITA ARORA)</u> Ch 1:- Python Revision Tour Ch 2:- Python Revision Tour-II Ch 3:-Working With Function Ch 5:- File Handling Ch 6:- Exception Handling
	INFORMATION PRACTICES	Ch-1 Python pandas- I Ch-2 Python Pandas - II Ch-3 Plotting with Pyplot
	PSYCHOLOGY	Chapter 1 - Variations in Psychological attributes
		Chapter 2 - Self and Personality

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PT-1		Chapter 3 - Meeting Life Challenges
	PHYSICAL EDUCATION	THEORY: Ch:-1. Management of Sporting Events. Ch:-2. Children and Women in Sports. Ch:-3. Yoga as Preventive Measure for Lifestyle Disease.
	PAINTING	The Rajasthani School of Miniature Painting.
		The Pahari School of Miniature Painting.
		The Mughal School of Miniature Painting
		PRACTICAL Nature and Object Study
	MUSIC	Theory: 1. Brief of the following: Alankar, kan, Meend 2. Brief history of the following: i) Gram, ii) Murchhana 3. Historical development of Time Theory of Ragas. 4. Life sketch and contribution of Faiyaz Khan 5. Description of prescribed Talas along with tala notation with Thah, dugun, Tingun and Chaugun: i) Jhaptala ii) Dhamar iii) Rupak 6. Writing in notation the compositions of raga: i) Bhairav 7. Tuning of Tanpura

PT-1

PT-1

	ECONOMICS	Introductory Macroeconomics:- 1. Money and Banking. Indian Economic Development — 1. Development Experience (1947-90) and Economic Reforms since 1991 .
	BENGALI	সাহিত্য চর্চা গদ্য:- i) কে বাঁচায়, কে বাঁচে- মানিক বন্দ্যোপাধ্যায় ii) নাটকঃ নানা রঙের দিন – অজিতেশ বন্দ্যোপাধ্যায় পদ্যঃ- iii) রূপনারাণের কূলে- রবীন্দ্রনাথ ঠাকুর iv) আমি দেখি – শক্তি চট্টোপাধ্যায় সহায়ক পাঠঃ আমার বাংলা -সুভাষ মুখোপাধ্যায় v) গারো পাহাড়ের নীচে vi) ছাতির বদলে হাতি উচ্চতর বাংলা ব্যাকরণ ১) ধ্বনিতত্ত্ব (একটি উদাহরণসহ সংজ্ঞা) ক) অপিনিহিতি খ) অভিশ্রুতি গ) স্বরসঙ্গতি ঘ) স্বরভক্তি ২) প্রবাদ-প্রবচন ও বাগধারা (অর্থসহ বাক্যে প্রয়োগ তালিকায় দেওয়া প্রথম ২৫টি) নির্মিতি ১) প্রতিবেদন রচনা
	HINDI	गद्य खंड - आरोह भाग -2 1. पहलवान की ढोलक - फणीश्वर नाथ रेणु 2. भक्ति महादेवी वर्मा 3. काले मेघा पानी दे- धर्मवीर भारती 4. बाजार दर्शन जैनेंद्र कुमार पद्य खंड - 1. एक गीत हरिवंश राय बच्चन 2. कविता के बहाने - कुंवर नारायण 3. कैमरे में बंद अपाहिज - रघुवीर सहाय बितान सिल्वर वेडिंग मनोहर जोशी जूझ आनंद यादव जनसंचार दबे पांव रचनात्मक लेखन विभिन्न माध्यमों के लिए लेखन अपठित गद्यांश - अपठित गद्यांश कैसे करें कहानी का नाटक रूपांतरण कैसे बनता है रेडियो नाटक अप्रत्याशित विषय पर लेखन
		BIOLOGY BOOK : 1. NCERT BIOLOGY 2. MODERN'S abc+ BIOLOGY (PART I + PART 2)

	BIOLOGY	Unit-VI Reproduction Chapter-1: Sexual Reproduction in Flowering Plants Chapter-2: Human Reproduction Chapter-3: Reproductive Health Chapter-4: Principles of Inheritance and Variation Chapter-5: Molecular Basis of Inheritance
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Examination Name	Subject	Content
HALF YEARLY	ENGLISH	<u>FLAMINGO</u> 1.The Last Lesson 2.Lost Spring 3.The Rat Trap 4. Aunt Jennifer’s Tigers 5. My Mother at Sixty Six 6. Deep Water 7. Indigo 8. The Interview 9. Keeping Quiet 10. Roadside Stand
		<u>VISTAS</u> 1. The Third Level 2. Journey to the end of the Earth 3. The Tiger King
		<u>WRITING</u> 1. Notice 2. Articles 3. Formal/Informal Invitations and Replies 4. Letter Writing 5. Report Writing
	HALF YEARLY	PHYSICS
Ch 2: Electric potential and capacitance		
Ch 3: current electricity		
Ch 4: Magnetic effect of electric current Ch 5: Magnetism Ch 6: Electromagnetic induction Ch 7: Ac Currents		

HALF YEARLY

CHEMISTRY

THEORY

**BOOK : 1. NCERT CHEMISTRY
PART (PART I + PART II)**

**2. MODERN'S abc+ CHEMISTRY
(PART I + PART 2)**

UNIT : 1 Solutions

UNIT : 3 Chemical Kinetics

UNIT : 4 The d- and f- block Elements

UNIT : 5 Coordination Compounds

UNIT : 6 Haloalkanes and Haloarenes

UNIT : 8 Aldehydes, Ketones and
Carboxylic Acids

UNIT : 9 Amines

UNIT : 10 Biomolecules

PRACTICAL

**BOOK : COMPREHENSIVE PRACTICAL
CHEMISTRY**

1. Volumetric Analysis
2. Salt Analysis
3. Content Based Experiment
4. Project
5. Class Record and viva

MATHEMATICS

NCERT MATHEMATICS

1. Integration
2. Matrices
3. Determinants
4. Continuity And Differentiability
- 5.. Application Of Derivatives
6. . Relations And Functions
7. Inverse Trigonometry Function

APPLIED MATHEMATICS

1. Calculus
(Derivatives up to second
order,Application of
Derivatives,Marginal Cost and
Marginal Revenue using
derivatives,Increasing
/Decreasing Functions,Maxima
and Minima,Integration,indefinite
Integrals as family of
curves,Definite Integrals as area
under the curve,Application of
Integration,Differential

HALF YEARLY

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YEARLY**

		Equations,Formulating and Solving Differential Equations) 2. LINEAR PROGRAMMING (Introduction and related terminology, Mathematical formulation of Linear Programming Problem,Different types of Linear Programming Problems,Graphical method of solution for problems in two variables,Feasible and Infeasible Regions,Feasible and infeasible solutions, optimal feasible solution)
	COMPUTER SCIENCE	BOOK:- COMPUTER SCIENCE WITH PYTHON (SUMITA ARORA) Ch 1:- Python Revision Tour Ch 2:- Python Revision Tour-II Ch 3:-Working With Function Ch 5:- File Handling Ch 6:- Exception Handling Ch 7:- Data Structures (7.5 Stacks) Ch 10:- Relational Database Ch 11:- Simple Queries in SQL Ch 12:- Table Creation and Data Manipulation Command Ch 13:-Grouping Records, Joins in SQL Ch 14:- Interface Python with MySQL
	INFORMATION PRACTICES	Ch-1 Python pandas- I Ch-2 Python Pandas - II Ch-3 Plotting with Pyplot Ch-4 Importing /Exporting Data between CSV Files/MySQL & pandas Ch-5 MySql revision tour Ch-6 My SQL functions Ch-7 Query Using SQL
	PSYCHOLOGY	Chapter 1 - Variations in Psychological attributes
		Chapter 2 - Self and Personality
		Chapter 3 - Meeting Life Challenges
		Chapter 4 - Psychological Disorders Chapter 5 - Therapeutic Approaches Chapter 6 - Attitude and Social Cognition
		THEORY: Ch:-1. Management of Sporting Events.

HALF YEARLY

PHYSICAL EDUCATION

Ch:-2. Children and Women in Sports.

Ch:-3. Yoga as Preventive Measure for Lifestyle Disease.

Ch:- 4. Physical Education & Sports for CWSN (Children with Special Needs - Divyang)

Ch:-5. Sports & Nutrition.

Ch:-6. Test & Measurement in Sports

PRACTICAL:

1. SAI khelo India Test.

2. Yoga-
Obesity: Paschimottanasana, Halasana.

Diabetes: Bhujangasana, Pawanmuktasana.

Asthma: Vakrasana, Gomukhiana

Hypertension: Katichakrasana, Ardha Halasana

Back pain and Arthritis:
Ardha-Chakrasana, Bhadrasana.

3. Proficiency in Game and Sports

4. Viva Voce(Health/Games & Sports/Yoga)

5. Record file :-
Record File shall include:

Practical-1. Fitness tests administration. (SAI Khelo India Test) With Pictures.

Practical-2 Procedure for Asanas, Benefits & Contraindication for any two Asanas for each lifestyle disease. with Pictures.

Practical-3: Anyone one IOA recognised Sport/Game of choice. Labelled diagram of Field & Equipment. Also mention its Rules, Terminologies & Skills.

HALF

YEARLY		
	PAINTING	Deccan Schools of Miniature Painting
		Indian National Flag
		The Bengal School of Painting
		Practical: Painting Composition
HALF YEARLY	MUSIC	Theory: 1. Brief of the following: Alankar, kan, Meend, Khatka, Murki, Gamak 2. Brief history of the following: i) Gram, ii) Murchhana, iii) Alap, iv) Tana 3. Historical development of Time Theory of Ragas. 4. Life sketch and contribution of Faiyaz Khan, Bade Gulam Ali Khan, Krishna Rao, Shankar Pandit 5. Description of prescribed Talas along with tala notation with Thah, dugun, Tingun and Chaugun: i) Jhaptala ii) Dhamar iii) Rupak 6. Writing notation the compositions of raga: i) Bhairav, ii) Bageshri, iii) Malkauns 7. Tuning of Tanpura. 8. Detail study of the following Sangeet Ratnakar, Sangeet Parijat. 9. Critical study of prescribed ragas along with recognizing ragas from phrases of swaras and elaborating them excluding Raga Shuddha Sarang. Practical:
HALF YEARLY		

HALF YEARLY

ECONOMICS

BENGALI

1. One vilambit khayal with simple elaborations and few tanas in any two of the prescribed ragas.
2. One drut khayal with simple elaborations and few tanas in the following ragas:

Bhairav, Bageshri, Malkauns
3. Ability to recognize the ragas from the phrases of swaras rendered by the examiner.
4. Recitation of thekas of Teentala, Ektala, and Chautala with Thah, Dugun, Tingun and Chaugun, keeping tala with hand beats.
5. Tuning of Tanpura.
6. One Tanas and one Dhamar with dugun and chaugun, keeping tala with handbeats.

Introductory Macroeconomics.

1. National Income and Related Aggregates .
2. Money and Banking.

Indian Economic Development .

1. Development Experience (1947-90) and Economic Reforms since 1991.
2. Current Challenges facing Indian Economy.
(Human capital formation, Rural development).

সাহিত্য চর্চা

গদ্যঃ-

i)কে বাঁচায়, কে বাঁচে- মানিক বন্দ্যোপাধ্যায়

ii)ভারতবর্ষ – সৈয়দ মুস্তাফা সিরাজ

iii)ভাত – মহাশ্বেতা দেবী

নাটকঃ নানা রঙের দিন – অজিতেশ বন্দ্যোপাধ্যায়

পদ্যঃ-

iv)রূপনারাণের কূলে- রবীন্দ্রনাথ ঠাকুর

HALF

YEARLY HALF YEARLY

v)আমি দেখি – শক্তি চট্টোপাধ্যায়
vi)ক্রন্দনরত জননীর পাশে – মৃদুল দাশগুপ্ত
vii)পড়তে জানে এমন এক মজুরের প্রশ্ন - বেটোল্ট ব্রেখট
সহায়ক পাঠঃ আমার বাংলা -সুভাষ মুখোপাধ্যায়
viii) গারো পাহাড়ের নীচে
ix) ছাতির বদলে হাতি
x) মেঘের গায়ে জেলখানা
xi)পাতালপুরীর রাজ্যে
উচ্চতর বাংলা ব্যাকরণ
১)ধ্বনিতত্ত্ব (একটি উদাহরণসহ সংজ্ঞা)
ক)অপিনিহিতি
খ) অভিশ্রুতি
গ)স্বরসঙ্গতি
ঘ) স্বরভক্তি
২)শব্দার্থতত্ত্ব
ক) অর্থের উৎকর্ষ
খ) অর্থের উপকর্ষ
গ) অর্থের সংকোচন
ঘ) অর্থের প্রসারণ
৩) প্রবাদ-প্রবচন ও বাগধারা (অর্থসহ বাক্যে প্রয়োগ)
নিমিতি
১) প্রতিবেদন রচনা
২) বিজ্ঞাপন রচনা

HINDI

आरोह भाग -2
गद्य खंड
श्रम विभाजन जाति प्रथा
मेरी कल्पना का आदर्श समाज
भीमराव अंबेडकर
काव्य खंड
रुवैया फिराक गोरखपुरी
छोटा मेरा खत
उमाशंकर जोशी
विज्ञान
सिल्वर वेडिंग
मनोहर जोशी
जूझ आनंद यादव

		अतीत में दबे पांव अभिव्यक्ति माध्यम पत्रकारिता लेखन की विभिन्न रूप और लेखन प्रक्रिया विशेष लेखन स्वरूप और प्रकार
	BIOLOGY	BIOLOGY BOOK : 1. NCERT BIOLOGY 2. MODERN'S abc+ BIOLOGY (PART I + PART 2) Unit-VI Reproduction Chapter-1: Sexual Reproduction in Flowering Plants Chapter-2: Human Reproduction Chapter-3: Reproductive Health Unit-VII Genetics and Evolution Chapter-4: Principles of Inheritance and Variation Chapter-5: Molecular Basis of Inheritance Chapter-6: Evolution Unit-VIII: Biology and Human Welfare Chapter-7: Human Health and Diseases Chapter-8: Microbes in Human Welfare Unit-IX Biotechnology and its Applications Chapter-9: Biotechnology - Principles and Processes Chapter-10: Biotechnology and its Applications