S. D. VIDYA MANDIR, HUDA, PANIPAT
HALF-YEARLY EXAMINATION
(SYLLABUS AND PAPER-PATTERN)
CLASS- 12 (SCIENCE)

	ENGLISH (SYLLABUS)	
Reading Section	Unseen Passages	
Writing Section	Notice Writing Invitations and Replies Letter to Editor Article Writing Report Writing	
Literature	**Flamingo** Ch- 1 The Last Lesson Ch- 2 Lost Spring Ch- 3 Deep Water Ch- 4 The Rattrap P- 1 My Mother at Sixty-Six P- 2 Keeping Quiet P- 3 A Thing of Beauty P- 4 A Roadside Stand	
	Vistas Ch- 1 The Third Level Ch- 2 The Tiger King Ch- 3 Journey to the End of the World Ch- 4 The Enemy	
	ENGLISH (PAPER-PATTERN)	
I	**Reading Section**	**22 Marks**
1.	Unseen Comprehension Passage 3 short questions (2×3=6) 4 MCQs (1×4=4) 2 very short questions (1×2=2)	**12**
2.	Unseen Comprehension Passage 2 short questions (2×2=4) 3 MCQs (1×3=3) 3 very short questions (1×3=3)	**10**
II	**Writing Section**	**18 Marks**
3. 4. 5. 6.	One out of the two Notices One out of the two Invitations and Replies One out of the two Letters One out of the two Article/Report	4 4 5 5
III	**Literature**	**40 Marks**
7.	One out of the two poetic extracts 4 short questions 2 MCQs	**6**
8.	One out of the two prose extracts from Vistas 3 short questions 1 MCQ	**4**
9.	One out of the two prose extracts from Flamingo 4 short questions 2 MCQ	**6**

10.	Five short questions out of six from Flamingo	2x5= 10
11.	Two short questions out of three from Vistas	2×2= 4
12.	One long question out of the two from Flamingo	5
13.	One long question out of the two from Vistas	5

CHEMISTRY (SYLLABUS)

1	Solutions	12
2	Electrochemistry	12
3	Chemical Kinetics	12
4	d and f block Elements	12
5	Coordination Compounds	11
6	Haloalkanes and Haloarenes	11

CHEMISTRY (PAPER-PATTERN)

S. No.	Type of Questions	Section	Marks of Each Question	Total Questions	Total Marks
1	Multiple Choice Type Questions	A	1	16	16
2	Very Short Answer Type Questions	B	2	5	10
3	Short Answer Type Questions	C	3	7	21
4	Case Based Questions	D	4	2	8
5	Long Answer Type Questions	E	5	3	15
	Total				70

PHYSICS (SYLLABUS)

Unit 1	Electrostatics	
Unit 2	Current Electricity	
Unit 3	Magnetic Effects of Currents and Magnetism	
Unit 4	Electromagnetic Induction and Alternating Current	

PHYSICS (PAPER PATTERN)

Section	Types Of Questions	Marks Of Each Question	Total Question	Total Marks
A	MCQ & Ass. and Reason	1	16	16
B	Very Short Answer	2	5	10
C	Short Answer Questions	3	7	21
D	Case Study Question	4	2	8
E	Long Answer Question	5	3	15
	TOTAL			70 Marks

	BIOLOGY (SYLLABUS)	
Chapter-2	Reproduction in Flowering Plants	(10 Marks)
Chapter-3	Human Reproduction	(12 Marks)
Chapter-4	Reproductive Health	(10 Marks)
Chapter-5	Principal of Inheritance and Variation	(13 Marks)
Chapter-6	Molecular Basis of Inheritance	(15 Marks)
Chapter-7	Evolution	(10 Marks)
	BIOLOGY (PAPER-PATTERN)	
Section A	MCQ and Assertion-Reason	16x1= 16
Section B	Very Short Answer Question	5x2= 10
Section C	Short Answer Questions	7x3= 21
Section D	Case Based Questions	2x4= 08
Section E	Long Answer Questions	3x5= 15
	Total	70
	MATHEMATICS (SYLLABUS)	
Ch 1	Relations and Functions	
Ch 2	Inverse Trigonometric Functions	
Ch 3	Matrices	
Ch 4	Determinants	
Ch 5	Continuity and Differentiability	
Ch 6	Applications of Derivative	
Ch 7	Integration (Up to Ex- 7.7)	
Ch 12	Linear Programming	
	MATHEMATICS (PAPER-PATTERN)	
	15 MCQS & 1 Assertion Reasoning-Based Question	16x1= 16
	2 Marks Questions 10	10x2= 20
	3 Marks Questions 07	07x3= 21
	4 Marks Questions - 02 (Case Studies)	02x4= 08
	5 Marks Questions - 03	03x5= 15
	APPLIED MATHEMATICS (SYLLABUS)	
Ch 1	Numbers, Quantification & Numerical Applications	
Ch 2	Numerical Inequalities	
Ch 3	Matrices	
Ch 4	Determinants	
Ch 5	Differentiation	
Ch 6	Application of Derivatives	
Ch 7	Integration	
Ch 8	Differential Equations	
	APPLIED MATHEMATICS (PAPER-PATTERN)	
	15 MCQS & 1 Assertion Reasoning-Based Question	16x1= 16
	2 Marks Questions 10	10x2= 20
	3 Marks Questions 07	07x3= 21
	4 Marks Questions - 02 (Case Studies)	02x4= 08
	5 Marks Questions - 03	03x5= 15

	ECONOMICS (SYLLABUS)	
	Macro Economics	
Ch 1	Some Basic Concepts of Macro Economics	
Ch 2	National Income and Related Aggregates	
Ch 3	Methods Of Calculating National Income	
Ch 4	Money	
Ch 5	Banking	
Ch 6	Aggregate Demand, Aggregate Supply and Related Concepts	
Ch 7	Short Run Equilibrium Output	
Ch 8	Problem Of Deficient Demand and Excess Demand	
	Indian Economic Development	
Ch 1	Indian Economy on The Eve Of Independence	
Ch 2	Indian Economy (1950-90)	
Ch 3	Liberalisation, Privatisation and Globalisation	
Ch 4	Human Capital Formation	
	ECONOMICS (PAPER-PATTERN)	
	Multiple Choice Questions (MCQ)	20x1= 20
	Short Answer Questions	04x3= 12
	Short Answer Questions	06x4= 24
	Long Answer Questions	04x6= 24
	TOTAL	80
	GEOGRAPHY (SYLLABUS)	
	Fundamentals of Human Geography	
Chapter 1	Human Geography	
Chapter 2	The World Population Density Distribution and Growth Human	
Chapter 3	Development	
Chapter 4	Primary Activities	
Chapter 5	Secondary Activities	
Chapter 6	Tertiary and Quaternary Activities +	
	India People and Economy	
Chapter 1	Population Distribution Density Growth and Composition	
Chapter 2	Human Settlements	
Chapter 3	Land Resources and Agriculture	
Chapter 4	Water Resources	
Chapter 5	Mineral and Energy Resources	
	GEOGRAPHY (PAPER-PATTERN)	
i.	Question paper contains 30 questions. All questions are compulsory.	
ii.	Question paper is divided into five sections. Sections- A, B, C, D and E.	
Section A	Question Number 1 To 17 (MCQ)	17x1= 17
Section B	Question Number 18 And 19 (Source Based Questions)	2x3= 6
Section C	Question Number 20 To 23 (Short Answer Type Questions) (80 To 100 Words)	4x3= 12
Section D	Question Number 24 To 28 (Long Answer Type Questions) (120 To 150 Words)	5x5= 25
Section E	Question Number 29 And 30 (Map Based Questions)	10

	INFORMATICS PRACTICES (IP) (SYLLABUS)	
Ch 1	Queries & Sql Functions	
Ch 2	Data Handliing using Pandas-I	
Ch 4	Plotting Data using MATPLOTLIB	

INFORMATICS PRACTICES (IP) (PAPER PATTERN)

Section	Marks Per Question	Total No. of Questions	Total Marks
Section A	1	18	18
Section B	2	7	14
Section C	3	5	15
Section D	4	2	8
Section E	5	3	15
Total		35	70

ARTIFICIAL INTELLIGENCE (AI) (SYLLABUS)

Part A	Unit 1: Communication Skill - IV Unit 2: Self - Management - IV Unit 3: ICT Skill-IV Unit 4: Entrepreneurial Skill - IV Unit 5: Green Skill - IV
Part B	Unit 1: Capstone Project Unit 2: Model Lifecycle

ARTIFICIAL INTELLIGENCE (AI) (PAPER PATTERN)

Type of Question	Marks Per Question	Total No. of Questions	Total Marks
Very Short Answer	1	24	24
Short Answer	2	7	14
Long Answer	4	3	12
Total		34	50

FINE ARTS (SYLLABUS)

Ch 1	Rajasthani School	
Ch 2	Mughal School	
Ch 3	Pahari School	
Ch 4	Deccan School	

FINE ARTS (PAPER PATTERN)

Questions 8 x 1 mark	08
Questions 5 x 2 marks	10
Questions 2 x 6 marks	12
Total Marks	**30**

MUSIC (SYLLABUS)

Definition
Alap, Tana, Meend, Kan, Khatka, Murki, Gram, Murchna, Gamak, And Alankar
Tunning Of Tanpura
Tala
Rupak and Jhaptal

	Biography Ustad Faiyaz Khan **Time Theory of Ragas and Sangeet Parijat** **Raga** Bhairav and Malkaunsh	
	MUSIC (PAPER PATTERN)	
	MCQ 8×1=8 5 Questions × 2 Marks=10 2 Questions × 6 Marks=12 Total	8×1= 08 5×2= 10 2×6 = 12 30
	PHYSICAL EDUCATION (SYLLABUS)	
Ch 1	Management of Sporting Events	(12 Marks)
Ch 2	Children and Women in Sports	(11 Marks)
Ch 3	Yoga as Preventive Measure for lifestyle Disease	(12 Marks)
Ch 4	Physical Education and Sports for CWSN	(12 Marks)
Ch 5	Sports and Nutrition	(11 Marks)
Ch 6	Test and Measurement in Sports	(12 Marks)
	PHYSICAL EDUCATION (PAPER PATTERN)	
	1 Mark Questions 2 Mark Questions 3 Marks Questions 4 Marks Questions (Case Studies). 5 Marks Questions Total Marks	1x18= 18 2x5= 10 3x5= 15 4x3= 12 5x3=15 70