

Birla Vidya Mandir, Nainital
Class XI- A
Annual Examination 2024 (Syllabus)

English

Section A:	Reading	(26 marks)
	1. Questions based on an unseen discursive passage	10
	2. Questions based on an unseen case-study based passage	8
	3. Passage for note making	8

Section B:	Grammar & Advance Writing Skills	(23 marks)
	4. Gap filling	1x4=4
	5. Transformation of sentences	1x3=3
	6. Classified Advertisement writing	3
	7. Poster making	3
	8. Speech writing	5
	9. Debate writing	5

Section C:	Literature	(31 marks)
	10. Questions based on poetry extract from Reader	1x3=3
	11. Questions based on prose extract from Reader	1x3=3
	12. Questions based on prose extract from Supplementary Reader	1x4=4
	13. Short answer questions from Reader	3x2=6
	14. Short answer question from Supplementary Reader	3
	15. Long answer question from Reader	6
	16. Long answer question from Supplementary Reader	6

Syllabus

1. Discursive passage
2. Case study based passage
3. Note making
4. Contextual grammar
5. Advertisement
6. Poster
7. Speech
8. Debate
9. Discovering Tut: the Saga Continues (Reader)
10. The Adventure (Reader)
11. Silk Road (Reader)
12. Childhood (Reader)
13. Father to Son (Reader)
14. Mother's Day (Supplementary Reader)
15. Birth (Supplementary Reader)
16. The Tale of Melon City (Supplementary Reader)

Mathematics

S. No.		1 marks	2 marks	3 marks	5 marks	4 marks
1.	Trigonometry	3	1	1	1	
2.	Linear Inequalities	2		1		
3.	Straight line	3	1	1	1	1
4.	Conic Section	2		1		
5.	Binomial Theorem	2	1	1	1	
6.	Three Dimensional Geometry	2	1			1

7.	Limits and derivatives	2			1	
8	Statistics	2		1		
9.	Probability	2	1			1
	Total	20x1=20	5x 2=10	6 x3=18	4 x5=20	3 x4 =12

Physics

1. Physical World and Measurement
2. Kinematics
3. Laws of Motion
4. Work, Energy and Power
5. Motion of System of Particles and Rigid Body
6. Gravitation
7. Properties of Bulk Matter
8. Thermodynamics
9. Behaviour of Perfect Gases and Kinetic Theory of Gases
10. Oscillations and Waves

Chemistry

1. Atomic structure
2. Classification of elements & periodicity in properties
3. 1st Law of thermodynamics & chemical energetics
4. Chemical bonding and molecular structure
5. Equilibrium
6. Redox reactions
7. Hydrocarbons

Chemistry Practical syllabus

1. Salt analysis
2. Acid base titration

Biology

Name of the Chapters

1. The living world
2. Biological classification
3. Plant kingdom
4. Animal kingdom
5. Morphology of flowering plants
6. Anatomy of flowering plants
7. Structural organization in Animals
8. Cell-The Unit of life
9. Biomolecules
10. Cell cycle and cell division
11. Photosynthesis in higher plants
12. Respiration in Plants
13. Plant- Growth and Development
14. Breathing and exchange of gases
15. Body fluids and circulation
16. Excretory products and their Elimination
17. Locomotion and Movement
18. Neural Control and coordination
19. Chemical coordination and Integration

Informatics Practices

Distribution of Marks

	Unit Name	Marks
1	Introduction to computer system	10
2	Introduction to Python	25
3	Database concepts and the Structured Query Language	30
4	Introduction to Emerging Trends	5
	Practical	30
	Total	100

Unit Wise syllabus

Unit 1: Introduction to Computer System

Introduction to computer and computing: evolution of computing devices, components of a computer system and their interconnections, Input/output devices.

Computer Memory: Units of memory, types of memory – primary and secondary, data deletion, its recovery and related security concerns.

Software: purpose and types – system and application software, generic and specific purpose software.

Unit 2: Introduction to Python

Basics of Python programming, execution modes: - interactive and script mode, the structure of a program, indentation, identifiers, keywords, constants, variables, types of operator, precedence of operators, data types, mutable and immutable data types, statements, expression evaluation. comments, input and output statements, data type conversion, debugging.

Control Statements: if-else, if-elif-else, while loop, for loop Lists: list operations - creating, initializing, traversing and manipulating lists, list methods and built-in functions – len(),list(),append(),insert(), count(),index(),remove(), pop(), reverse(), sort(), min(),max(),sum()

Dictionary: concept of key-value pair, creating, initializing, traversing, updating and deleting elements, dictionary methods and built-in functions – dict(), len(), keys(), values(), items(), update(), del, clear()

Unit 3: Database concepts and the Structured Query Language

Database Concepts: Introduction to database concepts and its need, Database Management System.

Relational data model: Concept of domain, tuple, relation, candidate key, primary key, alternate key

Advantages of using Structured Query Language, Data Definition Language, Data Query Language and Data Manipulation Language, Introduction to MySQL, creating a database using MySQL, Data Types

Data Definition: CREATE DATABASE, CREATE TABLE, DROP, ALTER

Data Query: SELECT, FROM, WHERE with relational operators, BETWEEN, logical operators, IS NULL, IS NOT NULL

Data Manipulation: INSERT, DELETE, UPDATE

Unit 4: Introduction to the Emerging Trends

Artificial Intelligence, Machine Learning, Natural Language Processing, Immersive experience (AR, VR), Robotics, Big data and its characteristics, Internet of Things (IoT), Sensors, Smart cities, Cloud Computing and Cloud Services (SaaS, IaaS, PaaS); Grid Computing, Block chain technology.

Physical Education

1. Changing Trends and Career in Physical Education
2. Olympism Value Education
3. Yoga
4. Physical Education and Sports for Children with Special Needs
5. Physical Fitness, Wellness and Lifestyle
6. Test, Measurement and Evaluation
7. Fundamentals of Anatomy, Physiology in Sports
8. Fundamentals of Kinesiology and Biomechanics in Sports
9. Psychology and Sports
10. Training and Doping in Sports

Painting

Chapter 4:- prehistoric art in India

Chapter 5:- Art of Indus valley

Chapter 6:- Art during mauryan shunga kushana and Gupta period.

Chapter 7:- Ajanta caves - 5th century CE

Chapter 8:- Artistic aspects of Indian temple sculpture

Chapter 9:- Bronze sculptures of India.

Chapter 10:- artistic aspects of the Indo Islamic architecture.

Psychology

UNIT 1	What is Psychology? The topics in this unit are: 1. Introduction 2. What is Psychology? • Psychology as a Discipline • Psychology as a Natural Science • Psychology as a Social Science 3. Understanding Mind and Behaviour 4. Popular Notions about the Discipline of Psychology 5. Evolution of Psychology 6. Development of Psychology in India 7. Branches of Psychology 8. Psychology and Other Disciplines 9. Psychology in Everyday Life	MARKS 11
UNIT II	Methods of Enquiry in Psychology The topics in this unit are: 1. Introduction 2. Goals of Psychological Enquiry • Steps in Conducting Scientific Research • Alternative Paradigms of Research 3. Nature of Psychological Data 4. Some Important Methods in Psychology • Observational Method • Experimental Method • Correlational Research • Survey Research • Psychological Testing • Case Study 5. Analysis of Data • Quantitative Method • Qualitative Method 6. Limitations of Psychological Enquiry 7. Ethical Issues	MARKS 13
UNIT III	Human Development The topics in this unit are: 1. Introduction 2. Meaning of Development • Life-Span Perspective on Development 3. Factors Influencing Development 4. Context of Development 5. Overview of Developmental Stages • Prenatal Stage • Infancy • Childhood • Challenges of Adolescence • Adulthood and Old Age	Marks 11
UNIT IV	Sensory, Attentional and Perceptual Processes The topics in this unit are: 1. Introduction 2. Knowing the world 3. Nature and varieties of Stimulus 4. Sense Modalities • Functional limitation of sense organs 5. Attentional Processes • Selective Attention • Sustained Attention Perceptual Processes • Processing Approaches in Perception 7. The Perceiver 8. Principles of Perceptual Organisation 9. Perception of Space, Depth and Distance • Monocular Cues and Binocular Cues 10. Perceptual Constancies 11. Illusions 12. Socio-Cultural Influences on Perception	Marks 8
UNIT 5	Learning The topics in this unit are: 1. Introduction 2. Nature of Learning 3. Paradigms of Learning 4. Classical Conditioning • Determinants of Classical Conditioning 5. Operant/Instrumental Conditioning • Determinants of Operant Conditioning • Key Learning Processes 6. Observational Learning 7. Cognitive Learning 8. Verbal Learning 9. Skill Learning 10. Factors Facilitating Learning 11. Learning Disabilities	Marks 9
UNIT 6	Human Memory The topics in this unit are: 1. Introduction 2. Nature of memory 3. Information Processing Approach : The Stage Model 4. Memory Systems : Sensory, Short-term and Longterm Memories 5. Levels of Processing 6. Types of Long-term Memory • Declarative and Procedural; Episodic and Semantic 7. Nature and Causes of Forgetting • Forgetting due to Trace Decay, Interference and Retrieval Failure 8. Enhancing Memory • Mnemonics using Images and Organisation	Marks 8
UNIT 7	Thinking The topics in this unit are: 1. Introduction 2. Nature of Thinking • Building Blocks of Thought 3. The Processes of Thinking 4. Problem Solving 5. Reasoning 6. Decision-making 7. Nature and Process of Creative Thinking • Nature of Creative Thinking • Process of Creative Thinking	Marks 5
UNIT 8	Motivation and Emotion The topics in this unit are: 1. Introduction 2. Nature of Motivation 3. Types of Motives • Biological Motives • Psychosocial Motives 4. Maslow's Hierarchy of Needs 5. Nature of Emotions 6. Expression of Emotions • Culture and Emotional Expression • Culture and Emotional Labelling 7. Managing Negative Emotions 8. Enhancing Positive Emotions	Marks 5

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Mathematics (Applied)

CHAPTERS	1MARK	2MARKS	3MARKS	4MARKS(case based)	5MARKS	TOTAL
Sets	3	-	1	1		5(10)
Probability	3	1	1	1		6(12)
Binary system and complex numbers	2	1			1	4(9)
Calendar	3	1			1	5(10)
Permutations and Combinations	3	1		1		5(9)
Conic Sections	2		1		1	4(10)
Exponents and Powers	2	1	2			5(10)
Limits and Derivatives	2		1		1	4(10)
Total no. of questions	20	5	6	3	4	38(80)

Accountancy

Class 11 Accountancy complete syllabus

Business Studies

UNITS	Name of the Units	Marks
1.	Nature & Purpose of Business	16 Marks
2.	Forms of Business Organisations	
3.	Public, Private & Global Enterprises	14 Marks
4.	Business Services	
5.	Emerging Modes of Business	10 Marks
6.	Social Responsibilities of Business	
7.	Sources of Business Finance	20 Marks
8.	Small Business	
9.	Internal Trade	20 Marks
10.	International Business	
	TOTAL	80 Marks
	(Theory)	
	(Practical/Project)	20 Marks
		100 Marks

Question-Paper Pattern (Theory)

Marks	No. Of Questions	TOTAL
01	20	20
03	05	15
04	03	12
05	03	15
06	03	18
TOTAL	34 Questions	80

Question/Marks-wise Word Limit

1. Answer to questions carrying 1 Mark may be from one word to one sentence.
2. Answer to questions carrying 3 Mark may be from 50 words to 75 words.
3. Answer to questions carrying 4-5 Mark may be about 150 words.
4. Answer to questions carrying 6 Mark may be about 200 words.
5. Attempt all parts of a questions together.

Economics

Chapter 1 – Introduction

Chapter 2 – Consumer behaviour

Chapter 3 – Theory of demand

Chapter 4 – Elasticity of demand

Chapter 5 – Production function

Chapter 6 – Concept of cost

Chapter 7 – Forms of market

Chapter 8 – Determination of equilibrium price and quantity

(Elementary statistics)

Chapter 1 – Organisation of data

Chapter 2 – Diagrammatic presentation

Chapter 3 – Graphic presentation

Chapter 4 – Measures of central tendency

Chapter 5 – Correlation

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Entrepreneurship

UNITS	Name of the Units	Marks
1.	Entrepreneurship: Concept and Functions (What, Why and How)	15 Marks
2.	An Entrepreneur	
3.	Entrepreneurial Journey	20 Marks
4.	Entrepreneurship as Innovation & Problem Solving	
5.	Concept of Market	15 Marks
6.	Business Finance and Arithmetic	20 Marks
7.	Resource Mobilization	
	TOTAL	70 Marks
	(Theory)	30 Marks
	(Project/Practical)	100 Marks

Question-Paper Pattern (Theory)

<u>Marks</u>	<u>No. Of Questions</u>	<u>TOTAL</u>
01	21	21
02	05	10
03	03	09
04	03	12
06	03	18
TOTAL	35 Questions	70

Question/Marks-wise Word Limit

1. Answer to questions carrying 1 Mark may be about 15 words.
2. Answer to questions carrying 2 Mark may be from 50 words.
3. Answer to questions carrying 3-4 Mark may be about 75-150 words.
4. Answer to questions carrying 6 Mark may be about 250 words.
5. Attempt all parts of a question together.

Physical Education

1. Changing Trends and Career in Physical Education
2. Olympism Value Education
3. Yoga
4. Physical Education and Sports for Children with Special Needs
5. Physical Fitness, Wellness and Lifestyle
6. Test, Measurement and Evaluation
7. Fundamentals of Anatomy, Physiology in Sports
8. Fundamentals of Kinesiology and Biomechanics in Sports
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