MOUNT ST. MARY'S SCHOOL
CLASS- XI A (2023-2024)
SUBJECT: HISTORY
(CODE NO. 027)

Section I: Early Societies
Timeline I (6MYA to 1BCE)
Theme 2: Writing and City Life

Section II: Empires
Timeline II (.c. 100 BCE to1300C.E)

Theme 3: An Empire across Three Continents

Theme 5: Nomadic Empires

Section III: Changing Traditions
Timeline III (.c. 1300 to 1700)

Theme 6: The Three Orders

Theme 7: Changing Cultural Traditions

Section IV: Towards Modernisation
Timeline IV (.c. 1700 to 2000)

Theme 10: Displacing Indigenous Peoples

Theme 11: Paths to Modernization

HISTORY EXAMINATION SYLLABUS

First Term (Pre Term 1)

Theme 2: Writing and City Life

Half Yearly Examination

Theme 2: Writing and City Life
Theme 3: An Empire Across Three Continents
Theme 5: Nomadic Empires

Second Term (Preterm 2)

Theme 5: Nomadic Empires
Theme 6: The Three orders

Final Term Examination

Theme 7: Changing cultural traditions
Theme 10: Displacing Indigenous Peoples
Theme 11: Paths to modernization

(***Including all the chapters done previously***)

Map Work

Map work of the related themes.

Project Work (20 marks)

Choose **any 1 topic** from the prescribed syllabus.

FEW SUGGESTIVE TOPICS FOR CLASS XI PROJECTS

1) Facets of the Industrialization in sixteenth- eighteenth centuries.

2) Crusades: causes; rationale; events; outcomes; Holy Alliance

3) Ancient History in depth: Mesopotamia

4) Greek Philosophy and City States

5) Contributions of Roman Civilization

6) The spirit of Renaissance: Manifestation in art; Literature; Sculpture; Influence on Trading Community; Social Fabric; Philosophy; Political Values; Rational Thinking; Existentialism

7) Aspects of Development -South American States /Central American States

8) Different schools of thoughts- Realism: Humanism: Romanticism

9) Piecing together the past of Genghis Khan

10)Myriad Realms of Slavery in ancient, medieval, and modern world

11)History of Aborigines – America /Australia

12)Facets of Modernization – China /Japan/Korea

MOUNT ST. MARY'S SCHOOL
SYLLABUS (2023-24)
CLASS -XI
SUBJECT- POLITICIAL SCIENCE (028)

BOOK 1 CONSTITUTION AT WORK

CH-1 Constitution(inclusive of Fundamental Rights and constitution as a living document)
CH- 2 Election and Representation
CH- 3 The Legislature
CH- 4 The Executive
CH- 5 The Judiciary
CH-6 Federalism
CH- 7 Local Government

BOOK -2 : POLITICAL THEORY

Ch-1 Political Theory: An Introduction
Ch-2 Liberty
Ch-3 Equality
Ch-5 Justice
Ch-6 Rights
Ch-7 Citizenship
Ch-8 Secularism

HALF YEARLY EXAM

BOOK 1: CONSTITUTION AT WORK

CH-1 Constitution (inclusive of Fundamental Rights and constitution as a living document)
CH- 2 Election and Representation
CH- 7 Local Government

Book -2 : POLITICAL THEORY

Ch-1 Political Theory: An Introduction
Ch-2 Liberty
Ch-3 Equality

PRE- TERM -II

BOOK 1: CONSTITUTION AT WORK

CH- 4 The Executive
CH- 5 The Judiciary

Book -2 : POLITICAL THEORY

Ch-5 Justice
Ch-6 Rights

FINAL TERM EXAM

BOOK 1: CONSTITUTION AT WORK

CH-6 Federalism
CH- 7 Local Government

INCLUDING ALL THE PREVIOUS CHAPTERS OF THIS BOOK

Book -2 : POLITICAL THEORY

Ch-7 Citizenship
Ch-8 Nationalism

INCLUDING ALL THE PREVIOUS CHAPTERS OF THIS BOOK

Chemistry Syllabus 2023-24
As per curriculum
(Class 11th C)

TERM-1

UNIT 1: Some Basic Concepts of Chemistry
UNIT 2: Structure of Atom
UNIT 3: Classification of Elements and Periodicity in Properties
UNIT 4: Chemical Bonding and Molecular Structure
UNIT 5: Chemical Thermodynamics
PRE-TERM-1: **UNIT 2: Structure of Atom**

HALF YEARLY EXAM:

UNIT 1: Some Basic Concepts of Chem
UNIT 2: Structure of Atom
UNIT 3: Classification of Elements and Periodicity in Properties
UNIT 4: Chemical Bonding and Molecular Structure
UNIT 5: Chemical Thermodynamics

TERM-11

UNIT 6: Equilibrium
UNIT 7: Redox Reactions
UNIT 8: Organic Chemistry: Some basic Principles and Techniques
UNIT 9: Hydrocarbons
PRE-TERM-II: **UNIT 6: Equilibrium**

ANNUAI EXAM: **ENTIRE TERM-1 & TERM-II SYLLABUS**

MOUNT ST. MARY'S SCHOOL
SYLLABUS 2023-24
Classes: XI
Subject: Biology

PRETERM 1	**CHAPTER 8, 9, 10**
HALFYEARLY	**CHAPTER 1,2, 3, 4, 5, 6, 7, 8, 9, 10**
PRE- TERM2	**13, 14,**
FINAL TERM	**ENTIRE SYLLABUS**

Unit-I Diversity of Living Organisms

Chapter-1:

The Living World Biodiversity; Need for classification; three domains of life; taxonomy and systematics; concept of species and taxonomical hierarchy; binomial nomenclature

Chapter-2:

Biological Classification Five kingdom classification; Salient features and classification of Monera, Protista and Fungi into major groups; Lichens, Viruses and Viroids.

Chapter-3:

Plant Kingdom Classification of plants into major groups; Salient and distinguishing features and a few examples of Algae, Bryophyta, Pteridophyta, Gymnospermae (Topics excluded – Angiosperms, Plant Life Cycle and Alternation of Generations)

Chapter-4:

Animal Kingdom Salient features and classification of animals, non-chordates up to phyla level and chordates up to class level (salient features and at a few examples of each category). (No live animals or specimen should be displayed.)

Unit-II Structural Organization in Plants and Animals

Chapter-5:

Morphology of Flowering Plants Morphology of different parts of flowering plants: root, stem, leaf, inflorescence, flower, fruit and seed. Description of family Solanaceae

Chapter-6:

Anatomy of Flowering Plants Anatomy and functions of tissue systems in dicots and monocots.

Chapter-7:

Anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of frog.

Unit-III Cell: Structure and Function

Chapter-8:

Cell-The Unit of Life Cell theory and cell as the basic unit of life, structure of prokaryotic and eukaryotic cells; Plant cell and animal cell; cell envelope; cell membrane, cell wall; cell organelles - structure and function; endomembrane system, endoplasmic reticulum, golgi bodies, lysosomes, vacuoles, mitochondria, ribosomes, plastids, microbodies; cytoskeleton, cilia, flagella, centrioles (ultrastructure and function); nucleus. 3

Chapter-9:

Biomolecules Chemical constituents of living cells: biomolecules, structure and function of proteins, carbohydrates, lipids, and nucleic acids; Enzyme - types, properties, enzyme action. (Topics excluded: Nature of Bond Linking Monomers in a Polymer, Dynamic State of Body Constituents – Concept of Metabolism, Metabolic Basis of Living, The Living State)

Chapter-10:

Cell Cycle and Cell Division Cell cycle, mitosis, meiosis and their significance

Unit-IV Plant Physiology

Chapter-11: Photosynthesis in Higher Plants Photosynthesis as a means of autotrophic nutrition; site of photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis.

Chapter-12: Respiration in Plants Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient.

Chapter-13: Plant - Growth and Development Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes in a plant cell; plant growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA.

Unit-V Human Physiology

Chapter-14:

Breathing and Exchange of Gases Respiratory organs in animals (recall only); Respiratory system in humans; mechanism of breathing and its regulation in humans - exchange of gases, transport of gases and regulation of respiration, respiratory volume; disorders related to respiration - asthma, emphysema, occupational respiratory disorders.

Chapter-15:

Body Fluids and Circulation Composition of blood, blood groups, coagulation of blood; composition of lymph and its function; human circulatory system - Structure of human heart and blood vessels; cardiac cycle, cardiac output, ECG; double circulation; regulation of cardiac activity; disorders of circulatory system - hypertension, coronary artery disease, angina pectoris, heart failure. 4

Chapter-16:

Excretory Products and their Elimination Modes of excretion - ammonotelism, ureotelism, uricotelism; human excretory system – structure and function; urine formation, osmoregulation; regulation of kidney function - renin - angiotensin, atrial natriuretic factor, ADH and diabetes insipidus; role of other organs in excretion; disorders - uremia, renal failure, renal calculi, nephritis; dialysis and artificial kidney, kidney transplant.

Chapter-17:

Locomotion and Movement Types of movement - ciliary, flagellar, muscular; skeletal muscle, contractile proteins and muscle contraction; skeletal system and its functions; joints; disorders of muscular and skeletal systems - myasthenia gravis, tetany, muscular dystrophy, arthritis, osteoporosis, gout.

Chapter-18:
Neural Control and Coordination Neuron and nerves; Nervous system in humans - central nervous system; peripheral nervous system and visceral nervous system; generation and conduction of nerve impulse
Chapter-19:
Chemical Coordination and Integration Endocrine glands and hormones; human endocrine system - hypothalamus, pituitary, pineal, thyroid, parathyroid, adrenal, pancreas, gonads; mechanism of hormone action (elementary idea); role of hormones as messengers and regulators, hypo - and hyperactivity and related disorders; dwarfism, acromegaly, cretinism, goiter, exophthalmic goitre, diabetes, Addison's disease. Note: Diseases related to all the human physiological systems to be taught in brief.

SYLLABUS FOR ACADEMIC SESSION (2023-2024)
CLASS- XI
PHYSICS

CHAPTER NO.	TOPIC
1	PHYSICAL WORLD
2	UNITS AND MEASUREMENTS
3	MOTION IN A STRAIGHT LINE
4	MOTION IN A PLANE
5	LAWS OF MOTION
6	WORK, ENERGY AND POWER
7	SYSTEM OF PARTICLES AND ROTATIONAL MOTION
8	GRAVITATION
9	MECHANICAL PROPERTIES OF SOLIDS
10	MECHANICAL PROPERTIES OF FLUIDS
11	THERMAL PROPERTIES OF MATTER
12	THERMODYNAMICS
13	KINETIC THEORY
14	OSCILLATIONS
15	WAVES

SYLLABUS DISTRIBUTION

PRE- TERM-I (MAY): CHAPTERS: 2, 3.

FIRST TERM (SEPTEMBER): CHAPTERS: 2, 3, 4, 5, 6, 7.

PRE- TERM-II (NOVEMBER): CHAPTERS: 8, 9, 10.

FINAL TERM (MARCH): CHAPTERS: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15.

Unit I: Physical World and Measurement 08 Periods
Chapter–2: Units and Measurements
Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units. significant figures. Dimensions of physical quantities, dimensional analysis and its applications.
Unit II: Kinematics 24 Periods
Chapter–3: Motion in a Straight Line
Frame of reference, Motion in a straight line, Elementary concepts of differentiation and integration for describing motion, uniform and nonuniform motion, and instantaneous velocity, uniformly accelerated motion, velocity - time and position-time graphs. Relations for uniformly accelerated motion (graphical treatment).
Chapter–4: Motion in a Plane
Scalar and vector quantities; position and displacement vectors, general vectors and their notations; equality of vectors, multiplication of vectors by a real number; addition and subtraction of vectors, Unit vector; resolution of a vector in a plane, rectangular components, Scalar and Vector product of vectors.

Motion in a plane, cases of uniform velocity and uniform accelerationprojectile motion, uniform circular motion.

Unit III: Laws of Motion 14 Periods

Chapter–5: Laws of Motion

Intuitive concept of force, Inertia, Newton's first law of motion; momentum and Newton's second law of motion; impulse; Newton's third law of motion. Law of conservation of linear momentum and its applications.

Equilibrium of concurrent forces, Static and kinetic friction, laws of friction, rolling friction, lubrication.

Dynamics of uniform circular motion: Centripetal force, examples of circular motion (vehicle on a level circular road, vehicle on a banked road).

Unit IV: Work, Energy and Power 14 Periods

Chapter–6: Work, Energy and Power

Work done by a constant force and a variable force; kinetic energy, workenergy theorem, power.

Notion of potential energy, potential energy of a spring, conservative forces: non-conservative forces, motion in a vertical circle; elastic and inelastic collisions in one and two dimensions.

Unit V: Motion of System of Particles and Rigid Body 18 Periods

Chapter–7: System of Particles and Rotational Motion

Centre of mass of a two-particle system, momentum conservation and Centre of mass motion. Centre of mass of a rigid body; centre of mass of a uniform rod.

Moment of a force, torque, angular momentum, law of conservation of angular momentum and its applications.

Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motions.

Moment of inertia, radius of gyration, values of moments of inertia for simple geometrical objects (no derivation).

Unit VI: Gravitation 12 Periods

Chapter–8: Gravitation

Kepler's laws of planetary motion, universal law of gravitation.

Acceleration due to gravity and its variation with altitude and depth.

Gravitational potential energy and gravitational potential, escape speed, orbital velocity of a satellite.

Unit VII: Properties of Bulk Matter 24 Periods

Chapter–9: Mechanical Properties of Solids

Elasticity, Stress-strain relationship, Hooke's law, Young’s modulus, bulk modulus, shear modulus of rigidity (qualitative idea only), Poisson's ratio; elastic energy.

Chapter–10: Mechanical Properties of Fluids

Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes), effect of gravity on fluid pressure.

Viscosity, Stokes' law, terminal velocity, streamline and turbulent flow, critical velocity, Bernoulli's theorem and its simple applications.

Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, application of surface tension ideas to drops, bubbles and capillary rise.

Chapter–11: Thermal Properties of Matter

Heat, temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; Cp, Cv - calorimetry; change of state - latent heat capacity.

Heat transfer-conduction, convection and radiation, thermal conductivity, qualitative ideas of Blackbody radiation, Wein's displacement Law, Stefan's law .

Unit VIII: Thermodynamics 12 Periods

Chapter–12: Thermodynamics

Thermal equilibrium and definition of temperature, zeroth law of thermodynamics, heat, work and internal energy. First law of thermodynamics,

Second law of thermodynamics: gaseous state of matter, change of condition of gaseous state -isothermal, adiabatic, reversible, irreversible, and cyclic processes.

Unit IX:Behavior of Perfect Gases and Kinetic Theory of Gases 08 Periods

Chapter–13: Kinetic Theory

Equation of state of a perfect gas, work done in compressing a gas.

Kinetic theory of gases - assumptions, concept of pressure. Kinetic interpretation of temperature; rms speed of gas molecules; degrees of

freedom, law of equi-partition of energy (statement only) and application to specific heat capacities of gases; concept of mean free path, Avogadro's number.

Unit X: Oscillations and Waves 26 Periods

Chapter–14: Oscillations

Periodic motion - time period, frequency, displacement as a function of time, periodic functions and their applications.

Simple harmonic motion (S.H.M) and its equations of motion; phase; oscillations of a loaded spring- restoring force and force constant; energy in S.H.M. Kinetic and potential energies; simple pendulum derivation of expression for its time period.

Chapter–15: Waves

Wave motion: Transverse and longitudinal waves, speed of travelling wave, displacement relation for a progressive wave, principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats.

PRACTICALS

Total Periods: 60

The record, to be submitted by the students, at the time of their annual examination, has to include:

• Record of at least 8 Experiments [with 4 from each section], to be performed by the students.

• Record of at least 6 Activities [with 3 each from section A and section B], to be performed by the students.

• Report of the project carried out by the students.

EVALUATION SCHEME

Time 3 hours Max. Marks: 30

Topic Marks

Two experiments one from each section 7+7

Practical record (experiment and activities) 5

One activity from any section 3

Investigatory Project 3

Viva on experiments, activities and project 5

Total 30

SECTION–A

Experiments

1. To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Callipers and hence find its volume.
2. To measure diameter of a given wire and thickness of a given sheet using screw gauge.
3. To determine volume of an irregular lamina using screw gauge.
4. To determine radius of curvature of a given spherical surface by a spherometer.
5. To determine the mass of two different objects using a beam balance.
6. To find the weight of a given body using parallelogram law of vectors.
7. Using a simple pendulum, plot its L-T 2 graph and use it to find the effective length of second's pendulum.
8. To study variation of time period of a simple pendulum of a given length by taking bobs of same size but different masses and interpret the result.
9. To study the relationship between force of limiting friction and normal reaction and to find the co- efficient of friction between a block and a horizontal surface.
10. To find the downward force, along an inclined plane, acting on a roller due to gravitational pull of the earth and study its relationship with the angle of inclination θ by plotting graph between force and $\sin\theta$.

Activities

1. To make a paper scale of given least count, e.g., 0.2cm, 0.5 cm.
2. To determine mass of a given body using a metre scale by principle of moments.
3. To plot a graph for a given set of data, with proper choice of scales and error bars.
4. To measure the force of limiting friction for rolling of a roller on a horizontal plane.
5. To study the variation in range of a projectile with angle of projection.
6. To study the conservation of energy of a ball rolling down on an inclined plane (using a double inclined plane).
7. To study dissipation of energy of a simple pendulum by plotting a graph between square of amplitude and time.

SECTION–B

Experiments

1. To determine Young's modulus of elasticity of the material of a given wire.
2. To find the force constant of a helical spring by plotting a graph between load and extension.

3. To study the variation in volume with pressure for a sample of air at constant temperature by plotting graphs between P and V, and between P and 1/V.
4. To determine the surface tension of water by capillary rise method.
5. To determine the coefficient of viscosity of a given viscous liquid by measuring terminal velocity of a given spherical body.
6. To study the relationship between the temperature of a hot body and time by plotting a cooling curve.
7. To determine specific heat capacity of a given solid by method of mixtures.
8. To study the relation between frequency and length of a given wire under constant tension using sonometer.
9. To study the relation between the length of a given wire and tension for constant frequency using sonometer.
10. To find the speed of sound in air at room temperature using a resonance tube by two resonance positions.

Activities

1. To observe change of state and plot a cooling curve for molten wax.
2. To observe and explain the effect of heating on a bi-metallic strip.
3. To note the change in level of liquid in a container on heating and interpret the observations.
4. To study the effect of detergent on surface tension of water by observing capillary rise.
5. To study the factors affecting the rate of loss of heat of a liquid.
6. To study the effect of load on depression of a suitably clamped metre scale loaded at (i) its end (ii) in the middle.
7. To observe the decrease in pressure with increase in velocity of a fluid.

MOUNT ST. MARY'S SCHOOL
SYLLABUS FOR ECONOMICS
SESSION 2023-2024

CLASS	EXAMINATION	PORTION TO BE COVERED	ART INTEGRATION PROJECT
CLASS XI	PRE-TERM 1	1. Introduction to Statistics 2. Introduction to Microeconomics – Production Possibility Curve 3. Collection of Data	Collage making on data presentation
	HALF YEARLY	1. Introduction to Statistics 2. Collection of data 3. Organisation of data 4. Presentation of data (Tabular, Bar diagram, Pie Diagram, Histogram, Frequency Polygon, Ogives, Arithmetic line graphs) 5. Consumer Behaviour (utility theory) 6. The Theory of Demand and elasticity of demand 7. Production function	PPT on G20
	PRE-TERM 2	1. Measures of central tendency (Mean, Median and Mode) 2. Theory of Cost	PPT on Welfare schemes
	FINAL	1. Collection of data 2. Organisation of data 3. Presentation of data – Tabular, bar diagrams, Pie diagram, histogram, frequency polygon, Ogives, Arithmetic line graph 4. Measures of central tendency – Mean, Median, Mode 5. Correlation – Spearman's rank correlation method 6. Index numbers 7. Consumer Equilibrium – Utility	CBSE prescribed project work

		Analysis 8. The Theory of Demand and elasticity of demand 9. Theory of Production – short run production function 10. Theory of cost 11. Theory of Revenue 12. Producer's Equilibrium 13. Theory of Supply and elasticity of supply 14. Forms of Market – Perfect competition 15. Price determination under Perfect Competition and the tools of demand and supply	

Mount St. Mary's School
Syllabus(2023-24)

Informatics Practices(065)-Class-11

Preterm-1(First Term)

Introduction to Computer System

Half Yearly Exam

Introduction to Computer System

Introduction to Python

Lists and Dictionaries

Emerging Trends

Preterm-2 (Second Term)

Database Concepts and SQL

Final Exam

Full Course

MOUNT ST. MARY'S SCHOOL
SYLLABUS 2023-24
MATHEMATICS
CLASS – 11

HALF YEARLY EXAMINATION

1. SETS
2. RELATIONS AND FUNCTIONS
3. TRIGONOMETRIC FUNCTIONS
4. COMPLEX NUMBERS
5. LINEAR INEQUALITIES
6. SEQUENCES AND SERIES
7. PERMUTATIONS AND COMBINATIONS
8. INTRODUCTION TO THREE DIMENSIONAL GEOMETRY
9. BINOMIAL THEOREM

PRE TERM 2

1. STRAIGHT LINES
2. CONIC SECTIONS

FINAL TERM

1. SETS
2. RELATIONS AND FUNCTIONS
3. TRIGONOMETRIC FUNCTIONS
4. COMPLEX NUMBERS
5. LINEAR INEQUALITIES
6. PERMUTATIONS AND COMBINATIONS
7. INTRODUCTION TO THREE DIMENSIONAL GEOMETRY
8. BINOMIAL THEOREM
9. STRAIGHT LINES
10. CONIC SECTIONS
11. STATISTICS
12. LIMITS AND DERIVATIVES
13. CONTINUITY - CLASS XII
14. MATRICES - CLASS XII

NOTE:

- ACTIVITIES AND ASSIGNMENTS BASED ON AIL(ART INTEGRATED LEARNING) WILL BE CARRIED OUT EVERY MONTH.
- FIVE PRACTICALS IN EACH TERM WILL BE DONE.

PHYSICAL EDUCATION

SYLLABUS (2023-2024)

CLASS XI

FIRST TERM

PRE-TERM I:

Unit 1: Changing trends & career in Physical education
Unit 2: Olympic Value Education

HALF-YEARLY/TERM-1:

Unit 1: Changing trends & career in Physical education
Unit 2: Olympic value Education
Unit 3: Physical Fitness, wellness and Lifestyle
Unit 4: Physical education & sports for CWSN (Children with special needs-Divyang)
Unit 5: Yoga
Unit 6: Physical Activity and Leadership Training

SECOND TERM

PRE-TERM II:

Unit 7: Test, measurement and Evaluation
Unit 8: Fundamentals of Anatomy, Physiology & Kinesiology in sports

FINAL EXAMINATION/TERM-2:

Unit 1: Changing trends & career in Physical education
Unit 2: Olympic value Education
Unit 3: Physical Fitness, Wellness & Lifestyle
Unit 4: Physical education & sports for CWSN (Children with special needs-Divyang)
Unit 5: Yoga

Unit 6: Physical Activity & Leadership Training
Unit 7: Test, measurement and Evaluation
Unit 8: Fundamentals of Anatomy, Physiology & Kinesiology in sports
Unit 9: Psychology and sports
Unit 10: Training and Doping in sports

Mount St. Mary's School
Revised Syllabus 2023-24
Class: XI
Subject: Business Studies

Pre Term 1:

1. Nature and Significance of Business
2. Forms of Business Organisation

Half Yearly:

1. Nature and Significance of Business
2. Forms of Business Organisation
3. Public, Private and Global Enterprises
5. Emerging Modes of Business
6. Social Responsibilities of Business

Pre Term 2:

7. Sources of Business Finance
8. Small Business
9. Internal Trade

Final Term:

Chapter 1 to 8
9. Internal Trade
10. International Business
Chapter 4- Planning (From Class XII)

Mount St. Mary's School
Revised Syllabus 2023-24
Class: XI
Subject: Accountancy

PRE TERM 1:
Chapter 1 – Introduction to Accounting
Chapter 2- Basic Accounting Terms
Chapter 3- Theory Base of Accounting
Chapter 4 – Basis of Accounting
Chapter 5 – Accounting Equation

Half Yearly:
Chapter 1 to 5
Chapter 6 – Accounting Procedures - Rules of Debit & Credit
Chapter 7 – Origin of Transactions
Chapter 8 – Journal
Chapter 9- Ledger
Chapter 10 – Special Purpose Books I- Cash Book
Chapter 11– Special Purpose Books II- Other Books
Chapter 12- Bank Reconciliation Statement

Chapter 13 – Trial Balance
Chapter 14 – Depreciation
Chapter 15- Provisions & Reserves

PRE TERM 2:

Chapter 14 – Depreciation
Chapter 16 – Rectification of Errors
Chapter 17- Financial Statements of Sole Proprietorship

Final Term:

Chapter 1 to 17
Chapter 18- Adjustments in Preparation of Financial Statements
Chapter 19- Accounts from Incomplete Records
Chapter 20- Computers in Accounting
Chapter 4- Accounting Ratios (From Class XII)

Project Work-

Students have to make a Comprehensive Project.

ENGLISH (CORE)

Code No. 301

2023-24

Background

Students are expected to have acquired a reasonable degree of language proficiency in English Language by the time they come to class XI, and the course aims, essentially, at promoting the higher-order language skills.

For a large number of students, the higher secondary stage will be a preparation for the university, where a fairly high degree of proficiency in English may be required. Additionally, for another large group, the higher secondary stage may be a preparation for entry into the professional domain. The Core Course caters to both groups by promoting the language skills required for academic study as well as the language skills required for the workplace.

Competencies to be focused on:

The general objectives at this stage are to:

- listen and comprehend live as well as recorded oral presentations on a variety of topics
- develop greater confidence and proficiency in the use of language skills necessary for social and academic purpose to participate in group discussions and interviews, by making short oral presentation on given topics
- perceive the overall meaning and organisation of the text (i.e., correlation of the vital portions of the text)
- identify the central/main point and supporting details, etc., to build communicative competence in various lexicons of English
- promote advanced language skills with an aim to develop the skills of reasoning, drawing inferences, etc. through meaningful activities
- translate texts from mother tongue(s) into English and vice versa
- develop ability and acquire knowledge required in order to engage in independent reflection and enquiry
- read and comprehend extended texts (prescribed and non-prescribed) in the following genres: science fiction, drama, poetry, biography, autobiography, travel and sports literature,etc.
- text-based writing (i.e., writing in response to questions or tasks based on prescribedor unseen texts), understand and respond to lectures, speeches, etc.
- write expository / argumentative essays, explaining or developing a topic, arguing a case, etc, write formal/informal letters and applications for different purposes

- make use of contextual clues to infer meanings of unfamiliar vocabulary
- select, compile and collate information for an oral presentation
- produce unified paragraphs with adequate details and support

- use grammatical structures accurately and appropriately
- write items related to the workplace (minutes, memoranda, notices, summaries, reports etc.
- filling up of forms, preparing CV, e-mail messages., making notes from referencematerials,recorded talks etc.

The core course should draw upon the language items suggested for class IX-X and delve deeper into their usage and functions. Particular attention may, however, be given to the following areasof grammar:

- The use of passive forms in scientific and innovative writings.
- Convert one kind of sentence/clause into a different kind of structure as well as other items to exemplify stylistic variations in different discourses modal auxiliaries-uses basedon semantic considerations.

A. Specific Objectives of Reading

Students are expected to develop the following study skills:

- skim for main ideas and scan for details
- refer to dictionaries, encyclopedia, thesaurus and academic referencematerial inany format
- select and extract relevant information, using reading skills of skimming and scanning
- understand the writer's purpose and tone
- comprehend the difference between the literal and the figurative
- differentiate between claims and realities, facts and opinions, form businessopinionsonthe basis of latest trends available
- comprehend technical language as required in computer related fields,arrive atpersonal conclusion and logically comment on a given text.
- Specifically develop the ability to be original and creative in interpreting opinion, develop the ability to be logically persuasive in defending one's opinion and making notes based on a text.

Develop literary skills as enumerated below:

- respond to literary texts
- appreciate and analyse special features of languages that differentiate literary texts from non-literary ones, explore and evaluate features of character,plot, setting, etc.
- understand and appreciate the oral, mobile and visual elements of drama. Identify the elements of style such as humour, pathos, satire and irony, etc.
- make notes from various resources for the purpose of developing theextracted ideas into sustained pieces of writing

B. Listening and Speaking

Speaking needs a very strong emphasis and is an important objective leading to professional competence. Hence, testing of oral skills must be made an important component of the overall testing pattern. To this end, speaking and listening skills are overtly built into the material to guide the teachers in actualization of the skills.

Specific Objectives of Listening & Speaking

Students are expected to develop the ability to:

- take organized notes on lectures, talks and listening passages
- listen to news bulletins and to develop the ability to discuss informally a wide rangingissues like current national and international affairs, sports, business, etc.
- respond in interviews and to participate in formal group discussions.
- make enquiries meaningfully and adequately and to respond to enquiries for thepurposeof travelling within the country and abroad.
- listen to business news and to be able to extract relevant important information.
- to develop public speaking skills.

C. Specific Objectives of WritingThe students will be able to:

- write letters to friends, relatives, etc. to write business and official letters.
- open accounts in post offices and banks. To fill in railway/airline reservation forms.
- draft notices, advertisements and design posters effectively and appropriately
- write on various issues to institutions seeking relevant information, lodgecomplaints,express gratitude or render apology.
- write applications, fill in application forms, prepare a personal bio-data foradmission intocolleges, universities, entrance tests and jobs.
- write informal reports as part of personal letters on functions, programmes andactivities held in school (morning assembly, annual day,sports day, etc.)
- write formal reports for school magazines/events/processes/ or in localnewspapersabout events or occasions.
- express opinions, facts, arguments in the form of speech or debates, using a variety ofaccurate sentence structures
- draft papers to be presented in symposia.
- take down notes from talks and lectures.
- write examination answers according to the requirement of various subjects.
- summarise a text.

Note: The creative writing section shall assess the prescribed competencies for writing skills,irrespective of any word limit.

D. More About Reading

Inculcating good reading habits in children has always been a concern for all stakeholders in education. The purpose is to create independent thinking individuals with the ability tonot only create their own knowledge but also critically interpret, analyse and evaluate it with objectivity and fairness. This will also help students in learning and acquiring better language skills.

Creating learners for the 21st century involves making them independent learners who canlearn, unlearn and relearn. If our children are in the habit of reading, they will learn to reinvent themselves and deal with the many challenges that lie ahead of them.

Reading is not merely decoding information or pronouncing words correctly. It is an interactive dialogue between the author and the reader in which the reader and the author share their experiences and knowledge with each other. Good readers are critical readerswith an ability to arrive at a deeper understanding of not only the world presented in the book but also of the realworld around them.

Consequently, they become independent thinkers capable of taking their own decisions in life rationally. Hence, a few activities are suggested below which teachers may use asa part of the reading project.

- Short review / dramatization of the story
- Commentary on the characters
- Critical evaluation of the plot, storyline and characters
- Comparing and contrasting the characters within the story, with other charactersinstories by the same author or by different authors
- Extrapolating about the story read or life of characters after the story endsdefendingcharacters actions in the story
- Making an audio story out of the novel/text to be read aloud.
- Interacting with the author
- Holding a literature fest where students role-play as various characters tointeract witheach other
- Role playing as authors/poets/dramatists, to defend their works and characters
- Symposiums and seminars for introducing a book, an author, or a theme
- Creating graphic novels out of novel or short stories they read

- Dramatizing incidents from a novel or a story
- Creating their own stories
- Books of one genre to be read by the whole class.

Teachers may select books and e-books suitable to the age and level of the learners. Careought to be taken to choose books that are appropriate in terms of language, theme andcontent and which do not hurt the sensibilities of a child.

Teachers may later suggest books from other languages by dealing with the same themes as an extended activity. The Project should lead to independent learning/reading skills and hence thechosen book should not be taught in class, but may be introduced through activities and be leftfor the students to read at their own pace. Teachers may, however, choose to assess a student's progress or success in reading the book by asking for verbalor written progress reports, lookingat their diary entries, engaging in a discussion about the book, giving a short quiz or a work sheetabout the book/short story. A befitting mode of assessment may be chosen by the teacher.

Methods and Techniques

The techniques used for teaching should promote habits of self-learning and reduce dependence on the teacher. In general, we recommend a multi-skill, learner-centred, activity based approach,of which there can be many variations.

- The core classroom activity is likely to be that of silent reading of prescribed/selected texts for comprehension, which can lead to other forms of language learning activities such as role-play, dramatization, group discussion, writing, etc., although many such activities could be carried out without the preliminary use of textualmaterial.
- It is important that students be trained to read independently and intelligently, interacting actively with texts, with the use of reference materials (dictionary, thesaurus,etc.) where necessary.

- Some pre-reading activity will generally be required, and the course books should suggest suitable activities, leaving teachers free to devise other activities when desired. So also, the reading of texts should be followed by post reading activities.
- It is important to remember that students should be encouraged to interpret texts in different ways.
- Group and pair activities can be resorted to, when desired, although many useful language activities can be carried out individually. In general, teachers should encourage students to interact actively with texts and with each other.
- Oral activity (group discussion, etc.) should be encouraged.

ENGLISH CORECODE NO. 301 CLASS – XI

2023-24

Section A – 26 MarksReading Skills

I Reading Comprehension through Unseen Passages (10+8=18 Marks)

1. One unseen passage to assess comprehension, interpretation, analysis, inference and vocabulary. Thepassage may be factual, descriptive or literary.

2. One unseen **case-based factual** passage with verbal/visual inputs like statistical data,charts etc.to assess comprehension, interpretation, analysis, inference and

evaluation.

Note: The combined word limit for both the passages will be 600-750.

Multiple Choice Questions / Objective Type Questions will be asked.

3. Note Making and Summarization based on a passage of approximately 200-250 words.

i.	Note Making:		**5 Marks**
	◦ Title:	1	
	◦ Numbering and indenting:	1	
	◦ Key/glossary:	1	
	◦ Notes:	2	
ii.	Summary (up to 50 words):		**3 Marks**
	◦ Content:	2	
	◦ Expression:	1	

Section B – 23 Marks Grammar and Creative Writing Skills

II Grammar **7 Marks**

4. Questions on Gap filling (Tenses, Clauses)
5. Questions on re-ordering/transformation of sentences

(Total seven questions to be done out of the eight given).

III Creative Writing Skills **16 Marks**

6. Short writing task – Classified Advertisements, up to 50 words. One out of the twogivenquestions to be answered **(3 Marks**: Format : 1 / Content : 1 / Expression : 1)

7. Short writing task –Poster up to 50 words. One out of the two given questions to beanswered.(**3 marks:**Format : 1 / Content : 1 / Expression : 1)

8. Long Writing task: Speech in 120-150 words based on verbal / visual cues related to contemporary / age-appropriate topic. One out of the two given questions to be answered.**(5 Marks**: Format: 1 / Content: 2 / Expression: 2)

9. Long Writing Task: Debate based on visual/verbal inputs in 120-150 words, thematically related to contemporary, topical issues. One out of the two given questionsto be answered. **(5 Marks**: Format: 1 / Content: 2 / Expression: 2)

Section C – 31 Marks

Literature Text Book and Supplementary Reading Text

This section will have variety of assessment items including Multiple Choice Questions, Objective Type Questions, Short Answer Type Questions and Long Answer Type Questions to assess comprehension, interpretation, analysis, evaluation and extrapolation beyond the text**.**

10. One Poetry extract out of two, from the book **Hornbill,** to assess comprehension, interpretation, analysis, inference and appreciation. **(3x1=3 Marks)**

11. One Prose extract out of two, from the book **Hornbill,** to assess comprehension,interpretation, analysis, evaluation and appreciation. **(3x1=3 Marks)**

12. One prose extract out of two, from the book **Snapshots,** to assess

comprehension,interpretation, analysis, inference and appreciation. **(4x1=4 Marks)**

13. Two Short answer type questions (one from Prose and one from Poetry, from the book **Hornbill**), outof four, to be answered in 40-50 words. Questions should elicit inferential responses through critical thinking. **(3x2=6 Marks)**
14. One Short answer type question, from the book **Snapshots,** to be answered in 40-50words. Questions should elicit inferential responses through critical thinking. One outof two questions to be done. **(3x1=3 Marks)**
15. One Long answer type question, from **Prose/Poetry of Hornbill,** to be answered in 120-150 words. Questions can be based on incident / theme / passage / extract / event, as reference points to assess extrapolation beyond and across the text. The question will elicit analytical and evaluative response from the student. Any one out of two questions to be done. **(1x6=6 Marks)**

16. One Long answer type question, based on the chapters from the book **Snapshots,** to be answered in 120-150 words, to assess global comprehension and extrapolation beyond the text. Questions toprovide analytical and evaluative responses, using incidents, events, themes, as reference points. Any one out of two questions to be done. **(1x6=6 Marks)**

Prescribed Books

1. **Hornbill:** English Reader published by National Council of Education Research and Training,New Delhi
   - The Portrait of a Lady (Prose)
   - A Photograph (Poem)
   - "We're Not Afraid to Die… if We Can be Together
   - Discovering Tut: the Saga Continues
   - The Laburnum Top (Poem)
   - The Voice of the Rain (Poem)
   - Childhood (Poem)
   - The Adventure
   - Silk Road (Prose)
   - Father to Son

2. **Snapshots:** Supplementary Reader published by National Council of EducationResearchand Training, New Delhi
   - The Summer of the Beautiful White Horse (Prose)
   - The Address (Prose)
   - Mother's Day (Play)
   - Birth (Prose)
   - The Tale of Melon City

INTERNAL ASSESSMENT
Assessment of Listening Skills - 05 marks.Assessment of Speaking Skills – 05 Marks Project Work - 10 Marks

Question Paper Design

English CORE XI (Code No. 301)2023-24

Section	Competencies	Total marks
Reading Skills	Conceptual understanding, decoding, Analyzing, inferring, interpreting, appreciating, literary, conventions and vocabulary, summarizing and using appropriate format/s.	26
Grammar and Creative Writing Skills	Conceptual Understanding, application of rules, Analysis, Reasoning, appropriacy of style and tone, using appropriate format and fluency, inference, analysis, evaluation and creativity.	23
Literature Text Book and Supplementary ReadingText	Recalling, reasoning, appreciating literary convention, inference, analysis, creativity withfluency, Critical Thinking.	31
	TOTAL	**80**
Internal Assessment	Assessment of Listening and Speaking Skills • Listening • Speaking	**10** 5+5
	• Project Work	**10**
	GRAND TOTAL	**100**

Computer Science CLASS-XI
Code No. 083
2023-24

1. Learning Outcomes

Student should be able to

a) develop basic computational thinking
b) explain and use data types
c) appreciate the notion of algorithm
d) develop a basic understanding of computer systems - architecture, operating system and cloud computing
e) explain cyber ethics, cyber safety and cybercrime
f) Understand the value of technology in societies along with consideration of gender and disability issues

2. Distribution of Marks

Unit No.	Unit Name	Marks	Periods	
			Theory	Practical
I	Computer Systems and Organisation	10	10	10
II	Computational Thinking and Programming - 1	45	80	60
III	Society, Law and Ethics	15	20	----
	Total	70	110	70

3. Unit wise Syllabus

Unit I: Computer Systems and Organisation

- Basic Computer Organisation: Introduction to computer system, hardware, software, input device, output device, CPU, memory (primary, cache and secondary), units of memory (Bit, Byte, KB, MB, GB, TB, PB)
- Types of software: system software (operating systems, system utilities, device drivers), programming tools and language translators (assembler, compiler & interpreter), application software
- Operating system (OS): functions of operating system, OS user interface
- Boolean logic: NOT, AND, OR, NAND, NOR, XOR, truth table, De Morgan's laws and logic circuits
- Number system: Binary, Octal, Decimal and Hexadecimal number system; conversion between number systems.
- Encoding schemes: ASCII, ISCII and UNICODE (UTF8, UTF32)

Unit II: Computational Thinking and Programming – 1

- Introduction to problem solving: Steps for problem solving (analysing the problem, developing an algorithm, coding, testing and debugging). representation of algorithms using flow chart and pseudo code, decomposition
- Familiarization with the basics of Python programming: Introduction to Python, features of Python, executing a simple "hello world" program, execution modes: interactive mode and script mode, Python character set, Python tokens (keyword, identifier, literal, operator, punctuator), variables, concept of l-value and r-value, use of comments
- Knowledge of data types: number (integer, floating point, complex), boolean, sequence (string, list, tuple), none, mapping (dictionary), mutable and immutable data types
- Operators: arithmetic operators, relational operators, logical operators, assignment operator, augmented assignment operators, identity operators (is, is not), membership operators (in, not in)
- Expressions, statement, type conversion & input/output: precedence of operators, expression, evaluation of expression, python statement, type conversion (explicit & implicit conversion), accepting data as input from the console and displaying output
- Errors: syntax errors, logical errors, runtime errors
- Flow of control: introduction, use of indentation, sequential flow, conditional and iterative flow control
- Conditional statements: if, if-else, if-elif-else, flowcharts, simple programs: e.g.: absolute value, sort 3 numbers and divisibility of a number
- Iterative statements: for loop, range function, while loop, flowcharts, break and continue statements, nested loops, suggested programs: generating pattern, summation of series, finding the factorial of a positive number etc
- Strings: introduction, indexing, string operations (concatenation, repetition, membership & slicing), traversing a string using loops, built-in functions: len(), capitalize(), title(), lower(), upper(), count(), find(), index(), endswith(), startswith(), isalnum(), isalpha(), isdigit(), islower(), isupper(), isspace(), lstrip(), rstrip(), strip(), replace(), join(), partition(), split()
- Lists: introduction, indexing, list operations (concatenation, repetition, membership & slicing), traversing a list using loops, built-in functions: len(), list(), append(), extend(), insert(), count(), index(), remove(), pop(), reverse(), sort(), sorted(), min(), max(), sum(); nested lists, suggested programs: finding the maximum, minimum, mean of numeric values stored in a list; linear search on list of numbers and counting the frequency of elements in a list
- Tuples: introduction, indexing, tuple operations (concatenation, repetition, membership & slicing), built-in functions: len(), tuple(), count(), index(), sorted(), min(), max(), sum(); tuple assignment,

nested tuple, suggested programs: finding the minimum, maximum, mean of values stored in a tuple; linear search on a tuple of numbers, counting the frequency of elements in a tuple

- Dictionary: introduction, accessing items in a dictionary using keys, mutability of dictionary (adding a new item, modifying an existing item), traversing a dictionary, built-in functions: len(), dict(), keys(), values(), items(), get(), update(), del, clear(), fromkeys(), copy(), pop(), popitem(), setdefault(), max(), min(), count(), sorted(), copy(); suggested programs : count the number of times a character appears in a given string using a dictionary, create a dictionary with names of employees, their salary and access them
- Introduction to Python modules: Importing module using 'import <module>' and using from statement, Importing math module (pi, e, sqrt, ceil, floor, pow, fabs, sin, cos, tan); random module (random, randint, randrange), statistics module (mean, median, mode)

Unit III: Society, Law and Ethics

- Digital Footprints
- Digital society and Netizen: net etiquettes, communication etiquettes, social media etiquettes
- Data protection: Intellectual Property Right (copyright, patent, trademark), violation of IPR (plagiarism, copyright infringement, trademark infringement), open source softwares and licensing (Creative Commons, GPL and Apache)
- Cyber-crime: definition, hacking, eavesdropping, phishing and fraud emails, ransomware, preventing cyber crime
- Cyber safety: safely browsing the web, identity protection, confidentiality, cyber trolls and bullying.
- Safely accessing web sites: malware, viruses, trojans, adware
- E-waste management: proper disposal of used electronic gadgets
- Indian Information Technology Act (IT Act)
- Technology & Society: Gender and disability issues while teaching and using computers

4. Practical

S.No.	Unit Name	Marks (Total=30)
1.	**Lab Test (12 marks)**	
	Python program (60% logic + 20% documentation + 20% code quality)	**12**
2.	**Report File + Viva (10 marks)**	
	Report file: Minimum 20 Python programs	**7**
	Viva voce	**3**
3.	Project (that uses most of the concepts that have been learnt) (See CS-XII for the rules regarding the projects)	**8**

5. Suggested Practical List

Python Programming

- Input a welcome message and display it.
- Input two numbers and display the larger / smaller number.
- Input three numbers and display the largest / smallest number.
- Generate the following patterns using nested loop.

Pattern-1	Pattern-2	Pattern-3
*	1 2 3 4 5	A
**	1 2 3 4	AB
***	1 2 3	AB
****	1 2	C
*****	1	ABCD
		ABCD
		E

- Write a program to input the value of x and n and print the sum of the following series:
  - $1+x+x^2+x^3+x^4+. \ldots\ldots x^n$
  - $1-x+x^2-x^3+x^4 \ldots\ldots x^n$
  - $x - \frac{x^2}{2} + \frac{x^3}{3} - \frac{x^4}{4} + \ldots\ldots\ldots\ldots \frac{x^n}{n}$
  - $x + x^2 - \frac{x^3}{2!} + \frac{x^4}{3!} \ldots\ldots\ldots\ldots \pm \frac{x^n}{n!}$
- Determine whether a number is a perfect number, an armstrong number or a palindrome.
- Input a number and check if the number is a prime or composite number.
- Display the terms of a Fibonacci series.
- Compute the greatest common divisor and least common multiple of two integers.
- Count and display the number of vowels, consonants, uppercase, lowercase characters in string.
- Input a string and determine whether it is a palindrome or not; convert the case of characters in a string.
- Find the largest/smallest number in a list/tuple
- Input a list of numbers and swap elements at the even location with the elements at the odd location.
- Input a list/tuple of elements, search for a given element in the list/tuple.
- Input a list of numbers and find the smallest and largest number from the list.
- Create a dictionary with the roll number, name and marks of n students in a class and display the names of students who have scored marks above 75.

6. Suggested Reading Material

- NCERT Textbook for COMPUTER SCIENCE (Class XI)
- Support Materials on the CBSE website.

MOUNT ST. MARY'S SCHOOL
CLASS XI
SUBJECT- PSYCHOLOGY (CODE NO. 037)
SYLLABUS- 2023-24

Chapter 1 – What is Psychology?
Chapter 2 – Methods of Enquiry in Psychology
Chapter 3 – Human Development
Chapter 4 – Sensory, Attentional & Perceptual Processes Chapter 5 – Learning
Chapter 6 – Human Memory
Chapter 7 – Thinking
Chapter 8 – Motivation & Emotion

EXAMINATION SYLLABUS
PRE TERM -I
Chapter 1 – What is Psychology?
Chapter 2 – Methods of Enquiry in Psychology

HALF YEARLY EXAMINATION
Chapter 1 – What is Psychology?
Chapter 2 – Methods of Enquiry in Psychology
Chapter 3 – Human Development
Chapter 4 – Sensory, Attentional & Perceptual Processes

PRE TERM -II
Chapter 6 – Sensory, Attentional & Perceptual Processes
Chapter 7 – Learning
Chapter 8 – Human Memory

FINAL TERM EXAMINATION
Chapter 1 – What is Psychology?
Chapter 2 – Methods of Enquiry in Psychology
Chapter 3 – Human Development
Chapter 4 – Sensory, Attentional & Perceptual Processes Chapter 5 – Learning
Chapter 6 – Human Memory
Chapter 7 – Thinking
Chapter 8 – Motivation & Emotion

PRACTICAL (Projects, experiments, small studies, etc.) – 30 marks
The students need to undertake one project and conduct two experiments. The project would involve the use of different methods of enquiry and related skills. Practical would involve conducting experiments and undertaking small studies, exercises, related to the topics covered in the course (e.g. Human development, Learning, Memory, Perception and Attention).