

SYLLABUS FOR ACADEMIC SESSION (2021-2022)

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-II: CHAPTERS: 1 to 4

FIRST TERM; CHAPTERS: 1 to 8

SECOND PRE-TERM-I: CHAPTERS: 9,10

SECOND PRE-TERM-II: CHAPTERS:11,12

FINAL TERM: CHAPTERS: (Entire syllabus)

MOUNT ST. MARY'S SCHOOL

SYLLABUS 2021-22

MATHEMATICS

CLASS – 11

PRE TERM

1. SETS
2. RELATIONS AND FUNCTIONS

HALF YEARLY EXAMINATION

1. SETS
2. RELATIONS AND FUNCTIONS
3. TRIGONOMETRIC FUNCTIONS
4. PRINCIPLE OF MATHEMATICAL INDUCTION
5. COMPLEX NUMBERS AND QUADRATIC EQUATIONS
6. LINEAR INEQUALITIES
7. SEQUENCES AND SERIES

POST TERM – 1

1. PERMUTATIONS AND COMBINATIONS
2. INTRODUCTION TO THREE DIMENSIONAL GEOMETRY
3. STRAIGHT LINES

POST TERM – 2

1. CONIC SECTIONS
2. STATISTICS

FINAL TERM

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

NOTE: ACTIVITIES AND ASSIGNMENTS BASED ON AIL(ART INTEGRATED LEARNING) WILL BE CARRIED OUT EVERY MONTH

PHYSICAL EDUCATION **SYLLABUS (2021-2022)**

CLASS XI

FIRST TERM

PRE-TERM 1:

Unit 1: Changing Trends & Career in Physical Education

Unit 2: Olympic value education

PRE-TERM 2:

Unit 3: Physical fitness, wellness & lifestyle

Unit 4: Physical education & sports for CWSN

HALF-YEARLY:

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

Unit 5: Yoga

Unit 6: Physical Activity and leadership training

SECOND TERM

PRE-TERM 1:

Unit 7: Test, Measurement & evaluation

Unit 8: Fundamentals of anatomy, physiology & kinesiology in sports

PRE-TERM 2:

Unit 9: Psychology & sports

Unit 10: Training and doping in sports

FINAL TERM:

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

Unit 5: Yoga

Unit 6: Physical Activity and leadership training

Unit 7: Test, Measurement & evaluation

Unit 8: Fundamentals of anatomy, physiology & kinesiology in sports

Unit 9: Psychology & sports

Unit 10: Training and doping in sports

Chemistry Syllabus 2021-22 (Class 11th C).

| CHAPTER NO. | CHAPTER NAME |
|-------------|--|
| 1 | Some basic concept of chemistry |
| 2 | Structure of atom (Art Integration) |
| 3 | Classification of elements and periodicity in properties |
| 4 | Chemical bonding and Molecular Structures (Art Integration) |
| 5 | States of matter |
| 6 | Thermodynamics (Art Integration) |
| 7 | Chemical equilibrium (Art Integration) |
| 8 | Redox reactions |
| 9 | Hydrogen |
| 10 | S-block elements |
| 11 | P- block elements |
| 12 | Organic chemistry-Some basic principles and techniques (Art Integration) |
| 13 | Hydrocarbons (Art Integration) |

PRE TERM-2(JULY):- Chapters 2

HALF YEARLY(SEPT) :- Chapters 2,3,4,5 & 6

SECOND PRE TERM-1(NOV):- Chapters 7,8

SECOND PRE TERM-2(JAN) : Chapters: 12 & 13

FINAL TERM:- Entire Syllabus

Note: Art Integration work is also included and mentioned in front of the chapters

MOUNT ST. MARY'S SCHOOL

SYLLABUS 2021-22

Classes: XI

Subject: Biology

| | |
|------------------|--------------------------------------|
| PRE- TERM 1 | ----- |
| PRETERM 2 | CHAPTER 1, 2, 3 |
| HALFYEARLY | CHAPTER 1, 2, 3, 4, 5 ,6,7, 8, 9, 10 |
| SECOND PRETERM 1 | CHAPTER 11, 12, 13, |
| SECOND PRETERM 2 | CHAPTER 14, 15, 16 |
| FINAL TERM | ENTIRE SYLLABUS |

PLEASENOTE: No Pre- term 1 for class 11

MOUNT ST. MARY'S SCHOOL

SYLLABUS FOR ECONOMICS

SESSION 2021-2022

| CLASS | EXAMINATION | PORTION TO BE COVERED | ART INTEGRATION PROJECT |
|-------|-------------|---|--|
| XI | PRE-TERM 1 | | |
| | PRE-TERM 2 | 1. Introduction to Statistics 2. Utility theory – Cardinal and Ordinal | 1. Poster making on the concept of “Theory of utility” 2. Collage making on data presentation |
| | HALF YEARLY | 1. Collection of data 2. Presentation of data (Tabular, Bar diagram, Pie Diagram, Histogram, Frequency Polygon, Ogives, Time Series Graph) | |

| | | | |
|--|------------|--|--|
| | | 3. Consumer Behaviour (utility theory) and The Theory of Demand | |
| | PRE-TERM 3 | 1. Measures of central tendency (Mean, Median and Mode) 2. Theory of production | 1. Mandala art on “Formulae of Measures of central tendency” |
| | PRE-TERM 4 | 1. Correlation (Karl Pearson’s Coefficient of correlation) 2. Theory of cost 3. Theory of revenue | |
| | FINAL | 1. Collection of data 2. Presentation of data 3. Measures of central tendency 4. Correlation 5. Index numbers 6. Consumer behaviour and the Theory of Demand 7. Theory of Production 8. Theory of cost 9. Theory of Revenue 10. Theory of Supply 11. Forms of Market 12. Price determination under Perfect Competition and the tools of demand and supply | 1. E -brochure for advertisement of a product |

Mount St. Mary’s School
Syllabus(2021-22)
Informatics Practices (065)-Class-11

Preterm-1(First Term)

Introduction to Computer System

Preterm-2 (First Term)

Introduction to Python

Half Yearly Exam

Introduction to Computer System

Introduction to Python

Database Concepts

Preterm-1 (Second Term)

Database Concepts and SQL

Preterm-2 (Second Term)

Emerging Trends

Final Exam

Full Course

Mount St. Mary’s School
Revised Syllabus 2021-22
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

PRE TERM 2:

Chapter 13 – Trial Balance

Chapter 14 – Depreciation

Chapter 15- Provisions & Reserves

Chapter 16- Accounting for Bills of Exchange

PRE TERM3:

Chapter 17 – Rectification of Errors

Chapter 18- Financial Statements of Sole Proprietorship

Final Term:

Chapter 1 to 18

Chapter 19- Adjustments in Preparation of Financial Statements

Chapter 20- Accounts from Incomplete Records

Chapter 21- Computers in Accounting

Project Work-

Students have to make a Comprehensive Project.

Mount St. Mary's School

Revised Syllabus 2021-22

Class: XI

Subject: Business Studies

Pre Term 1:

1. Nature and Significance of Business

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:

- 4. Business Services
- 7. Sources of Business Finance

Pre Term 3:

- 8. Small Business
- 9. Internal Trade

Final Term:

- Chapter 1 to 8
- 9. Internal Trade
- 10. International Business

CLASS XI
SUBJECT: POLITICAL SCIENCE (CODE NO. 028)
SYLLABUS 2021-2022

BOOK (PART A):

INDIAN CONSTITUTION AT WORK

- 1. Constitution: why and how?
- 2. Rights in the Indian constitution (This chapter will be done under ch-1)
- 3. Election and representation
- 4. Executive
- 5. Legislature
- 6. Judiciary
- 7. Federalism (This chapter has been deleted from the syllabus)
- 8. Local governments (Only the topics Why local governments and growth of local govts? has been deleted)
- 9. Constitution: a living document (This chapter is now part of ch-1)

BOOK (PART B)

POLITICAL THEORY

- 1. Political theory: an introduction
- 2. Liberty
- 3. Equality
- 4. Justice
- 5. Rights
- 6. Citizenship (This chapter has been deleted from the syllabus)
- 7. Nationalism (This chapter has been deleted from the syllabus)
- 8. Secularism (This chapter has been deleted from the syllabus)
- 9. Peace (This chapter has been deleted from the syllabus)
- 10. Development

EXAMINATION SYLLABUS

TERM -I EXAM (PRE-TERM- 2)

PART A

CH-1. Constitution: why and How?

Ch- 2. Rights in the Indian constitution

PART B

Ch-1 Political Theory: An Introduction

HALF YEARLY EXAMINATION

PART A

CH- 1. Constitution: Why and How?

Ch-2. Rights in the Indian Constitution

Ch-3. Election and Representation

Ch-8. Local Governments

PART B

CH-1. Political theory: an introduction

Ch-2. Liberty

Ch-3. Equality

TERM -II EXAM (PRE-TERM -1)

PART A

Ch- 4. Executive

PART B

CH-4. Justice

Ch-5. Rights

TERM -II (PRE- TERM -2)

PART A

CH-5. Legislature

CH-6. Judiciary

PART B

CH-10 Development

FINAL TERM EXAMINATION

FULL SYLLABUS OF BOOK (PART A) AND BOOK (PART-B)

PROJECT WORK (20 MARKS) INCLUSIVE OF VIVA ON WHICH THE PROJECT HAS BEEN MADE)

ALL STUDENTS HAVE TO UNDERTAKE THE PROJECT ON ANY ONE OF THE GIVEN TOPICS

CONSTITUTION: THE LIFELINE OF INDIAN DEMOCRACY

OR

ELECTION COMMISSION: THE PILLAR OF INDIAN DEMOCRATIC GOVT

CLASS- XI A
SUBJECT - HISTORY
SYLLABUS (2021-2022)
(CODE NO. 027)

Section I: Early Societies Timeline I

(6MYA to 1BCE)

Theme 1: From the Beginning of Time (This Chapter has been deleted)

Theme 2: Writing and City Life

Section II: Empires

Timeline II (.c. 100 BCE to 1300 C. E)

Theme 3: An Empire across three continents

Theme 4: The Central Islamic lands

Theme 5: Nomadic Empires (This Chapter has been deleted)

Section III: Changing traditions

Timeline III (.c. 1300 to 1700)

Theme 6: The Three orders

Theme 7: Changing cultural traditions

Theme 8: Confrontations of Cultures (This Chapter has been deleted)

Section IV: Towards Modernisation

Timeline IV (.c. 1700 to 2000)

Theme 9: The Industrial revolution

Theme 10: Displacing Indigenous Peoples

Theme 11: Paths to modernization

HISTORY EXAMINATION SYLLABUS

PRE TERM 1

Theme 2: Writing and City Life

PRE TERM 2

Theme 3: An Empire across three continents

HALF YEARLY EXAMINATION

Theme 2: Writing and City Life

Theme 3: An Empire across three continents

Theme 4: The Central Islamic lands

Theme 6: The Three orders

SECOND TERM PRETERM 1

Theme 7: Changing Cultural Traditions Theme 9:

The Industrial Revolution

SECOND TERM PRETERM 2

Theme 10: Displacing Indigenous Peoples

Theme 11: Paths to modernization

FINAL TERM EXAMINATION

Full syllabus

MAP WORK

Outline Political map of World

PROJECT WORK (20 marks)

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

The marks will be allocated under the following heads:

| | |
|---|-----------------|
| 1. Project Synopsis | 2 Marks |
| 2. Data/Statistical analysis/Map work | 3 Marks |
| 3. Visual/overall presentation | 5 Marks |
| 4. Analysis/explanation and interpretation | 5 Marks |
| 5. Bibliography | 1 Mark |
| 6. Viva | 4 Marks |
| Total | 20 Marks |

CLASS XI

SUBJECT: PSYCHOLOGY (CODE NO. 037)

SYLLABUS 2021-22

Chapter 1 – What is Psychology?

Chapter 2 – Methods of Enquiry in Psychology

Chapter 3 – The bases of Human Behaviour

Chapter 4 – Human Development

Chapter 5 – Sensory, Attentional & Perceptual Processes

Chapter 6 – Learning

Chapter 7 – Human Memory

Chapter 8 – Thinking

Chapter 9 – Motivation & Emotion

EXAMINATION SYLLABUS

TERM – I EXAM (PRE-TERM 2)

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 – The bases of Human Behaviour

TERM – II EXAM (PRE TERM -I)

Chapter 4 – Human Development

TERM – II EXAM (PRE TERM – II)

Chapter 5 – Sensory, Attentional & Perceptual Processes

FINAL TERM EXAMINATION

Chapter 1 – What is Psychology?

Chapter 2 – Methods of Enquiry in Psychology

Chapter 3 – The bases of Human Behaviour

Chapter 4 – Human Development

Chapter 5 – Sensory, Attentional & Perceptual Processes

Chapter 6 – Learning

Chapter 7 – Human Memory

PRACTICAL (Projects, experiments, small studies, etc.) – 30 marks

The students need to undertake one project and conduct one experiment. 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).

DELETED PORTION

| Chapter | Deleted Portion |
|---|--|
| Chapter 5 – Sensory, Attentional & Perceptual Processes | Visual Sensation - pages 87-91 Auditory Sensation – pages 91-93 |
| Chapter 6 – Learning | Concept Learning – page 120 Transfer of Learning – page 122 Learning Styles – page 125 Application of Learning Principles – pages 127-128 |

| | |
|----------------------------------|---|
| Chapter 7 – Human Memory | Knowledge Representation & Organization in Memory – pages 139-142 |
| Chapter 8 – Thinking | Complete Chapter |
| Chapter 9 – Motivation & Emotion | Complete Chapter |
| Experiment/Project | Removal of one experiment out of two |

Computer Science Syllabus CLASS-XI Code No.(083) 2021-22

Term I

Unit I: Computer Systems and Organisation

Basic computer organisation: description of a computer system and mobile system, CPU, memory, hard disk, I/O, battery.

Types of software: Application software, System software and Utility software. Memory Units: bit, byte, MB, GB, TB, and PB.

Number System: numbers in base 2, 8, 16 and binary addition. Encoding Schemes : ASCII, ISCI and Unicode

Concept of Compiler and Interpreter

Operating System (OS) - need for an operating system, brief introduction to functions of OS, user interface

Unit II: Computational Thinking and Programming - 1

Introduction to Problem solving: Problem solving cycle - Analysing a problem, designing algorithms and representation of algorithm using flowchart and pseudo-code.

Familiarization with the basics of Python programming: a simple "hello world" program, the process of writing a program (Interactive & Script mode), running it and print statements; simple data-types: integer, float and string.

Features of Python, Python Character Set, Token & Identifiers, Keywords, Literals, Delimiters, Operators.

Comments: (Single line & Multiline/ Continuation statements), Clarity & Simplification of expression

Introduce the notion of a variable and methods to manipulate it (concept of L-value and R-value even if not taught explicitly).

Knowledge of data types and operators: accepting input from the console, assignment statement, expressions, operators and their precedence.

Operators & types: Binary operators-Arithmetic, Relational Operators, Logical Operators, Augmented Assignment Operators.

Execution of a program, errors- syntax error, run-time error and logical error.

Conditional statements: if, if-else, if-elif-else; simple programs: e.g.: absolute value, sort 3 numbers and divisibility of a number.

Notion of iterative computation and control flow: for(range(),len()), while, using flowcharts, suggested programs: calculation of simple and compound interests, finding the factorial of a positive number etc.

Strings: Traversal, operations – concatenation, repetition, membership; functions/methods– len(), capitalize(), title(), upper(), lower(), count(), find(), index(), isalnum(), islower(),

isupper(), isspace(), isalpha(), isdigit(), split(), partition(), strip(), lstrip(), rstrip(), replace());
String slicing.

Lists: Definition, Creation of a list, Traversal of a list. Operations on a list - concatenation, repetition, membership; functions/methods—len(), list(), append(), extend(), insert(), count(), index(), remove(), pop(), reverse(), sort(), min(), max(), sum(); Lists Slicing; Nested lists; 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.

Term II

Boolean logic: NOT, AND, OR, NAND, NOR, XOR, NOT, truth tables and De Morgan's laws, Logic circuits

Unit III: Society, Law and Ethics

Cyber safety: safely browsing the web, identity protection, confidentiality, social networks, cyber trolls and bullying.

Appropriate usage of social networks: spread of rumours, and common social networking sites (Twitter, LinkedIn, and Facebook) and specific usage rules.

Safely accessing web sites: adware, malware, viruses, trojans

Safely communicating data: secure connections, eavesdropping, phishing and identity verification.

Intellectual property rights, plagiarism, digital rights management, and licensing (Creative Commons, GPL and Apache), open source, open data, privacy.

Privacy laws, fraud; cyber-crime- phishing, illegal downloads, child pornography, scams; cyber forensics, IT Act, 2000.

Technology and society:

understanding of societal issues and cultural changes induced by technology. E-waste management: proper disposal of used electronic gadgets.

Identity theft, unique ids and biometrics.

Gender and disability issues while teaching and using computers.

Revision of Python concepts.

Practical Questions

Discussion in Python Data

files and Text files in

Python

ENGLISH SYLLABUS FOR CLASS XI- 2021-22

PRE-TERM 1 SYLLABUS

1. Portrait of a Lady
2. A Photograph
3. GENERAL GRAMMAR
4. Comprehension

PRE-TERM 2 SYLLABUS

1. Summer of the Beautiful White Horse

2. The Address

3. Comprehension

4. Grammar

TERM 1 SYLLABUS

Hornbill

1. The Portrait of a Lady

2. A Photograph

3. We are not afraid to die...

4. Discovering Tutankhamun

5. Voice of the Rain

6. Laburnum Top

7. Landscape of the Soul

Snapshots

1. Summer of the Beautiful White Horse

2. The Address

3. Ranga's Marriage

4. Albert Einstein at School

General Grammar

1. Editing/Omission

2. Jumbled Sentences

3. Fill in the Blanks

Writing Skills

1. Notice

2. Poster

3. Invitations (Formal + Informal)

4. Letter to the Editor

5. Business Letters (Enquiry+ Order+ Complaint+ Cancellation)

6. Article Writing

Reading Skill

1. Note- Making

PRE-TERM 3 SYLLABUS

1. Mother's Day
2. Comprehension
3. General Grammar
4. Writing/Reading Skills Done In Term 1

Pre-Term 3 Syllabus

1. The Ailing Planet
2. Comprehension
3. Note- Making
4. General Grammar

FINAL TERM SYLLABUS

1. TERM 1 SYLLABUS
2. Birth
3. Silk Road
4. Childhood
5. Speech, Debate Writing
8. Ailing Planet
9. The Browning Version
10. Mother's Day