

CLASS-11 BIOLOGY

- PRE-TERM : Chapter 1 -3
- FIRST TERM: Chapter 1 -10
- PRE-TERM -2 : Chapter 11, 12,and 13
- FINAL EXAMINATION: Chapter 1-22

Chemistry syllabus 2019-20 (Class 11th B).

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

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- **PRE TERM-1:-** Chapters 2 & 3
- **FIRST TERM :-** Chapters 1,2,3,4,5 & 6
- **PRE TERM-2:-** Chapters 7,8 & 12
- **FINAL TERM:-** Entire Syllabus

Syllabus 2019-20

Class: XI

Subject: Accountancy

- **Pre Term I:**
- 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
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- **First Term:**
- Chapter 1 to 5
- Chapter 6 – Rules of Debit & Credit
- Chapter 7 – Vouchers
- Chapter 8 – Journal & Ledger
- Chapter 9 – Special Purpose Books- Cash Book
- Chapter 10– Special Purpose Books- Subsidiary Books

- Chapter 11- Bank Reconciliation Statement
- Chapter 12 – Trial Balance
- Chapter 13 – Depreciation
- Chapter 14- Provisions & Reserves
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- **Pre Term II:**
- Chapter 15- Accounting for Bills of Exchange
- Chapter 16 – Rectification of Errors
- Chapter 17- Financial Statements of Sole Proprietorship
- Chapter 18- Adjustments in Preparation of Financial Statements
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- **Final Term:**
- Chapter 1 to 18
- Chapter 19- Accounts of Incomplete Records
- Chapter 20- Computers in Accounting
- Project Work-
- Some portion of Class XII will be covered in Class XI i.e. from Accounting Ratios

ENGLISH SYLLABUS- 2019-20
CLASS XI

1. PRE-TERM I

- (A) THE PORTRAIT OF A LADY
- (B) PHOTOGRAPH
- (C) WRITING SKILLS – ARTICLE/LETTER TO THE EDITOR

2. FIRST TERM

HORNBILL

- (A) THE PORTRAIT OF A LADY
- (B) PHOTOGRAPH
- (C) WE ARE NOT AFRAID TO DIE...
- (D) DISCOVERING TUTANKHAMUN
- (E) LANDSCAPE OF THE SOUL
- (F) THE LABURNUM TOP
- (G) THE VOICE OF THE RAIN

SNAPSHOTS

- (A) SUMMER OF THE BEAUTIFUL WHITE HORSE
- (B) THE ADDRESS
- (C) RANGA'S MARRIAGE
- (D) ALBERT EINSTEIN AT SCHOOL
- (E) MOTHER'S DAY

WRITING SKILLS

- (A) ADVERTISEMENTS, POSTER, NOTICE, INVITATIONS, BUSINESS LETTERS, JOB APPLICATION, LETTER TO THE EDITOR

3. PRE- TERM II

- (A) CHILDHOOD
- (B) THE ADVENTURE
- (C) WRITING SKILLS- ADVERTISEMENT, POSTER, NOTICE, INVITATION
- (D) GENERAL GRAMMAR

4. FINAL TERM

- (A) HORNBILL- COMPLETE BOOK
- (B) SNAPSHOTS- COMPLETE BOOK
- (C) ALL WRITING SKILLS DONE IN TERM I + REPORT, ARTICLE, SPEECH, DEBATE

BUSINESS STUDIES SYLLABUS 2019-20 CLASS XI

Pre Term I:

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

First Term:

- Chapters 1 and 2
3. Public, Private and Global Enterprises
 4. Business Services
 5. Emerging Modes of Business
 6. Social Responsibilities of Business

Pre Term II:

- Chapter 5
7. Sources of Business Finance
 8. Small Business

Final Term:

- Chapter 1 to 8
9. Internal Trade
 10. International Business
 11. Nature and Significance of Management

Syllabus – Economics (2019 – 2020)**Class XI**

Name of the Examination	Microeconomics	Statistics
Pre Term	Introduction	Introduction
Half Yearly	<ul style="list-style-type: none">• Introduction• Consumer's Equilibrium• The Law of Demand• The Production Function• The Theory of Cost	<ul style="list-style-type: none">• Collection of Data• Organization of Data• Presentation of Data
Post – Term	<ul style="list-style-type: none">• The Theory of Revenue	<ul style="list-style-type: none">• Measures of central Tendency (Mean, Median and Mode)
Final	<ul style="list-style-type: none">• Introduction• Consumer's Equilibrium and Demand• The Production Function• The Theory of Cost• The Theory of Revenue• Producer's Equilibrium• The Law of Supply• Forms of Market• Price Determination and Application of Demand and Supply	<ul style="list-style-type: none">• Collection of Data• Organization of Data• Presentation of Data• Measures of Central Tendency(Mean, Median and Mode)• Measures of Dispersion• Correlation• Index Numbers

SYLLABUS FOR ACADEMIC SESSION (2019-2020)

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: CHAPTERS: 1, 2.

FIRST TERM: CHAPTERS: 1, 2, 3, 4, 5, 6, 7, And 8.

PRE- TERM-II: CHAPTERS: 9, 10.

FINAL TERM: CHAPTERS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 (Entire syllabus)

MATHEMATICS 2019-20

CLASS – XI

PRE - TERM - 1

1. SETS
2. PRINCIPLE OF MATHEMATICAL INDUCTION

FIRST TERM

1. SETS
2. RELATIONS AND FUNCTIONS
3. TRIGONOMETRIC FUNCTIONS
4. COMPLEX NUMBERS AND QUADRATIC EQUATIONS
5. PRINCIPLE OF MATHEMATICAL INDUCTION
6. THREE DIMENSIONAL GEOMETRY
7. SEQUENCES AND SERIES
8. PERMUTATION AND COMBINATION
9. LINEAR INEQUALITY

PRE – TERM- 2

1. BINOMIAL THEOREM
2. STRAIGHT LINES
3. CONIC SECTIONS
4. TRIGONOMETRIC FUNCTIONS
5. LINEAR PROGRAMMING

FINAL TERM

1. SETS
2. RELATIONS AND FUNCTIONS
3. TRIGONOMETRIC FUNCTIONS
4. COMPLEX NUMBERS AND QUADRATIC EQUATIONS
5. THREE DIMENSIONAL GEOMETRY
6. PERMUTATION AND COMBINATION
7. LINEAR INEQUALITY + LINEAR PROGRAMMING(CLASS – XII)
8. BINOMIAL THEOREM
9. STRAIGHT LINES
10. CONIC SECTIONS
11. PROBABILITY
12. LIMITS AND DIFFERENTIABILITY
13. CONTINUITY CLASS - XII
14. MATRICES CLASS- XII

INFORMATICS PRACTICES – SYLLABUS- 2019-20

CLASS XI

TERM-1

Basic computer organisation: describe a computer system and mobile system, CPU, memory, hard disk, I/O, battery, power, transition from a calculator to a computer Familiarization with the basics of Python programming: a simple “hello world” program, process of writing a program, running it, and print statements; simple data-types: integer, float, string 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.

Conditional statements: if, if-else, if-elif-else; simple programs: e.g.: absolute value, sort 3 numbers, divisibility. Notion of iterative computation and control flow: for, while, flowcharts, decision trees and pseudo code; write a lot of programs: interest calculation, EMI, tax calculation (examples from GST), standard deviation, correlation Lists and dictionary: finding the maximum, minimum, mean; linear search on a list of numbers, and counting the frequency of elements in a list using a dictionary. Text handling: compare, concat, and substring operations. Introduction to Python modules: creating and importing.

Final Term

Data Management (DM-1) Relational databases: idea of a database and the need for it, relations, keys, primary key, foreign key; Use SQL commands to create a table, keys, and foreign keys; insert/delete an entry, delete a table. Basic SQL: select, project, and join; indexes, and a lot of in-class practice.

Data Handling (DH-1) . Introduction to Python Pandas Introduction to data structures in Pandas: Series, and Data Frame Operations on a Series: head, tail, vector operations Data Frame operations: create, display, iteration, select column, add column, delete column Binary operations in a Data

Frame: add, sub, mul, div, radd, rsub Matching and broadcasting operations Missing data and filling values. Comparisons, Boolean reductions, comparing Series, and combining Data Frames. Transfer data between CSV files/SQL databases, and Data Frame objects.

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, and phishing and identity verification.

PRE TERM - 1 EXAMINATION

Basic Computer organization

Python Fundamentals

FIRST TERM EXAMINATION

Term1 Syllabus

PRE TERM – 2 EXAMINATION

Data Management

FINAL TERM EXAMINATION

Full syllabus

Computer Science (New) CLASS-XI Code No. 083

Programming and Computational Thinking

Familiarization with the basics of Python programming: a simple "hello world" program, process of writing a program, running it, and print statements; simple data-types: integer, float, string Introduce the notion of a variable, and methods to manipulate it (concept of L-value and Rvalue even if not taught explicitly) Knowledge of data types and operators: accepting input from the console, assignment statement, expressions, operators and their precedence. Conditional statements: if, if-else, if-elif-else; simple programs: e.g.: absolute value, sort 3 numbers, and divisibility. Notion of iterative computation and control flow: for, while, flowcharts, decision trees and pseudo code; write a lot of programs: interest calculation, primarily testing, and factorials. Idea of debugging: errors and exceptions; debugging: pdb, break points. Lists, tuples and dictionary: finding the maximum, minimum, mean; linear search on list/tuple of numbers, and counting the frequency of elements in a list using a dictionary. Introduce the notion of accessing elements in a collection using numbers and names. Sorting algorithm: bubble and insertion sort; count the number of operations while sorting. Strings: compare, concat, substring; notion of states and transitions using state transition diagrams.

Programming in Python:

At least the following Python concepts should be covered in the lab sessions: expressions, conditionals, loops, list, dictionary, and strings. The following are some representative lab assignments. Find the largest and smallest numbers in a list. Find the third largest number in a list. Test for primarily. Find whether a string is a palindrome or not. Given two integers x and n, compute x^n . Compute the greatest common

divisor and the least common multiple of two integers. • Test if a number is equal to the sum of the cubes of its digits. Find the smallest and largest • such numbers..

Functions: scope, parameter passing, mutable/immutable properties of data objects, pass arrays to functions, return values, functions using libraries: mathematical, and string functions.

File handling: open and close a file, read, write, and append to a file, standard input, output, • and error streams, relative and absolute paths. Using Python

libraries: create and import Python libraries • Recursion: simple algorithms with recursion: factorial, Fibonacci numbers; recursion on •

arrays: binary search Idea of efficiency: performance defined as inversely proportional to the wall clock time, count • the number of operations a piece of code is performing, and measure the time taken by a program. Example: take two different programs for the same problem, and understand how the efficient one takes less time. Data visualization using Pyplot: line chart, pie chart, and bar chart. • Data-structures: lists, stacks, queues. •

Computer Systems and Organisation (CSO)

Basic computer organisation: description of a computer system and mobile system, CPU, • memory, hard disk, I/O, battery, power. Types of software: application, OS, utility, libraries. • Language of Bits: bit, byte, MB, GB, TB, and PB. • Boolean logic: OR, AND, NAND, NOR, XOR, NOT, truth tables, De Morgan's laws • Information representation: numbers in base 2, 8, 16, unsigned integers, binary addition • Strings: ASCII, UTF8, UTF32, ISCII (Indian script code) • execution ◊ binary ◊ Execution of a program: basic flow of compilation – program • Interpreters (process one line at a time), difference between a compiler and an interpreter • Running a program: Notion of an operating system, how an operating system runs a program, • idea of loading, operating system as a resource manager. Concept of cloud computers, cloud storage (public/private), and brief introduction to parallel • computing.

Data Management (DM-1)

Relational databases: idea of a database and the need for it, relations, keys, primary key, • foreign key; use SQL commands to create a table, keys, foreign keys; insert/delete an entry, delete a table. SQL commands: select, project, and join; indexes, and a lot of in-class practice. • Basics of NoSQL databases - Mongo DB. •

Data Management 2:

SQL Commands At least the following SQL commands should be covered during the labs: create, insert, delete, select, and join. The following are some representative assignments. Create a student table with the student id, name, and marks as attributes where the student id • is the primary key. Insert the details of a new student in the above table. • Delete the details of a particular student in the above table. • Use the select command to get the details of the students with marks more than 80. • Create a new table (name, date of birth) by joining two tables (student id, name) and (student • id, date of birth). Create a new table (order ID, customer Name, and order Date) by joining two tables (order • ID, customer ID, and order Date) and (customer ID, customer Name, contact Name, country)

Society, Law and Ethics (SLE-1) - Cyber safety

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.

Pre Term 1 : Programming and Computational Thinking, Programming in Python:

Term 1: Programming and Computational Thinking, Programming in Python: Computer Systems and Organisation (CSO) Data Management:

Pre term 2: Programming in Python: File handling, Society, Law and Ethics (SLE-1) - Cyber safety

Final term : whole syllabus

PHYSICAL EDUCATION

CLASS XI (2019-2020)

FIRST TERM SYLLABUS

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

CLASS XI (2019-2020)

FINAL TERM SYLLABUS

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