ACCOUNTANCY (Code No. 055)

Class-XI

PART A: FINANCIAL ACCOUNTING - I

Unit-2: Accounting Process

Topics Deleted
Bank Reconciliation Statement: ● Bank Reconciliation Statement with Adjusted Cash Book **Accounting for Bills of Exchange** Retirement of bill Renewal of bill

Part B: Financial Accounting - II

Unit 3: Financial Statements of Sole Proprietorship

Units/Topics
Incomplete Records Difference between accounts from incomplete records and Statement of Affairs. Preparation of Trading, Profit and Loss account and Balance Sheet.

Unit 4: Computers in Accounting

Units/Topics
● Introduction to operating software, utility software and application software. Introduction to accounting information system (AIS) as a part of Management Information System. ● Stages in automation: (a) Accounting process in a computerised environment; comparison between manual accounting process and computerised accounting process, (b) Sourcing of accounting software; kinds of software: readymade software; customised software and tailor-made software; generic considerations before sourcing accounting software (c) creation of account groups and hierarchy (d) generation of reports - trial balance, profit and loss account and balance sheet

● **5 lectures were reduced in project work.**
● **Total lectures reduced are 45 lectures.**

Class-XII

Part A: Accounting for Not-for-Profit Organizations, Partnership Firms and Companies

Unit 2: Accounting for Partnership Firms

Units/Topics
Accounting for Partnership firms - Reconstitution and Dissolution. ● **Admission of a partner** - adjustment of capital accounts and preparation of balance sheet. ● **Retirement and death of a partner:** adjustment of capital accounts. Preparation of loan account of the retiring partner. ● Preparation of deceased partner's capital account and his executor's account.

Unit - 3 Accounting for Companies

Units/ Topics
Accounting for Debentures ● Redemption of debentures-Methods: Lump sum, draw of lots.

Project Work:

From session 2020-21 onwards, there would be only ONE project (specific) to be prepared.

Note: Kindly refer to the related Guidelines published by the CBSE.

● **Since there is only one project instead of three hence 10 Lectures were reduced in the same.**

Biology
(Code No. 044)

DELETED PORTIONS CLASS XI

- **Under Unit 1: Diversity of Living Organisms**
  - o **Chapter-1: The Living World**
    - taxonomy and systematics;
    - tools for study of taxonomy- museums, zoological parks, herbaria, botanical gardens, keys for identification.
  - o **Chapter-3: Plant Kingdom**
    - Angiospermae; Angiosperms - classification up to class, characteristic features and examples.

- **Under Unit-II Structural Organization in Animals and Plants**
  - o **Chapter-5: Morphology of Flowering Plants**
    - Morphology and modifications: Morphology of different parts of flowering plants: root, stem, leaf, fruit and seed.
    - Description of families: - Fabaceae
  - o **Chapter-6: Anatomy of Flowering Plants**
    - Anatomy and functions of different tissues and tissue systems in dicots and monocots. Secondary growth.
  - o **Chapter-7: Structural Organisation in Animals**
    - Morphology, Anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of an insect (cockroach), (a brief account only).

- **Under Unit-IV Plant Physiology**
  - o **Chapter-11: Transport in Plants**
    - Movement of water, gases and nutrients; cell to cell transport, diffusion, facilitated diffusion, active transport; plant-water relations, imbibition, water potential, osmosis, plasmolysis; long distance transport of water - Absorption, apoplast, symplast, transpiration pull, root pressure and guttation; transpiration, opening and closing of stomata; Uptake and translocation of mineral nutrients - Transport of food, phloem transport, mass flow hypothesis.
  - o **Chapter-12: Mineral Nutrition**
    - Essential minerals, macro- and micronutrients and their role; deficiency symptoms; mineral toxicity; elementary idea of hydroponics as a method to study mineral nutrition; nitrogen metabolism, nitrogen cycle, biological nitrogen

fixation.

- o **Chapter-15: 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;
  - Seed dormancy; vernalisation; photoperiodism

- **Under Unit-V Human Physiology**
  - o **Chapter-16: Digestion and Absorption**
    - Alimentary canal and digestive glands, role of digestive enzymes and gastrointestinal hormones; Peristalsis, digestion, absorption and assimilation of proteins, carbohydrates and fats; calorific values of proteins, carbohydrates and fats; egestion; nutritional and digestive disorders - PEM, indigestion, constipation, vomiting, jaundice, diarrhoea.
  - o **Chapter-20: Locomotion and Movement**
    - Types of movement - ciliary, flagellar, muscular;
    - Skeletal system and its functions; joints; disorders of muscular and skeletal systems - myasthenia gravis, tetany, muscular dystrophy, arthritis, osteoporosis, gout.

  - o **Chapter-21: Neural Control and Coordination**
    - reflex action; sensory perception; sense organs; elementary structure and functions of eye and ear

DELETED PORTIONS CLASS XI: PRACTICAL

A: List of Experiments

1. Description of Family Fabaceae; Types of root (Tap and adventitious); types of stem (herbaceous and woody); leaf(arrangement, shape, venation, simple and compound).
2. Preparation and study of T.S. of dicot and monocot roots and stems (primary)
3. Study of osmosis by potato osmometer.
4. Study of plasmolysis in epidermal peels (e.g. Rhoeo/lily leaves or flashy scale leaves of onion bulb).
5. Comparative study of the rates of transpiration in the upper and lower surface of leaves.
6. Test for the presence of sugar, starch, proteins and fats in suitable plant and animal materials.
7. Test for presence of urea in urine.

8. Test for presence of bile salts in urine.

B. Study/Observation of the following (spotting)

1. Tissues and diversity in shape and size of plant cells (palisade cells, guard cells, parenchyma, collenchyma, sclerenchyma, xylem and phloem) throughtemporary and permanent slides.
2. Different modifications in roots, stems and leaves.
3. Different types of inflorescence (cymose and racemose).
4. Human skeleton and different types of joints with the help of virtual images/models only.

DELETED PORTION CLASS XII

- **Under Unit-VI Reproduction**

  - **Chapter-1: Reproduction in Organism**
    - Reproduction, a characteristic feature of all organisms for continuation of species; modes of reproduction - asexual and sexual reproduction; asexual reproduction - binary fission, sporulation, budding, gemmule formation, fragmentation; vegetative propagation in plants.

- **Under Unit-VII Genetics and Evolution**

  - **Chapter-7: Evolution**
    - Origin of life; biological evolution and evidences for biological evolution (paleontology, comparative anatomy, embryology and molecular evidences); Darwin's contribution, modern synthetic theory of evolution; mechanism of evolution - variation (mutation and recombination) and natural selection with examples, types of natural selection; Gene flow and genetic drift; Hardy – Weinberg's principle; adaptive radiation; human evolution.

- **Under Unit-VIII Biology and Human Welfare**

  - **Chapter 9: Strategies for Enhancement in Food Production**
    - Animal husbandry, Plant breeding, tissue culture, single cell protein.

- **Under Unit-X Ecology and Environment**

  - **Chapter-14: Ecosystem**
    - Ecosystems: Patterns, components; productivity and decomposition; energy flow; pyramids of number, biomass, energy; nutrient cycles (carbon and phosphorous); ecological succession; ecological services - carbon fixation, pollination, seed dispersal, oxygen release (in brief).

  - **Chapter 16: Environmental Issues**
    - Air pollution and its control; water pollution and its control; agrochemicals and their effects; solid waste management; radioactive waste management; greenhouse effect and climate change impact and mitigation; ozone layer depletion; deforestation; exemplifying case study as success story addressing environmental issue(s).

DELETED PORTIONS CLASS XII: PRACTICAL

A: List of Experiments

1. Study the presence of suspended particulate matter in air at two widely different sites.
2. Study the plant population density by quadrat method.
3. Study the plant population frequency by quadrat method.

B. Study/Observer of the following (spotting)

1. Pollen germination on stigma through a permanent slide or scanning electron micrograph.
2. Mendelian inheritance using seeds of different colour/sizes of any plant.
3. Controlled pollination - emasculation, tagging and bagging.

BUSINESS STUDIES (Code No. 054)

CLASS–XI

Part A: Foundation of Business

Unit	Topics deleted
Unit 2: Forms of Business organizations	Choice of form of business organization
Unit 3: Public, Private and Global Enterprises	Global Enterprises – Feature. Joint ventures, Public private partnership – concept
Unit 4: Business Services	Postal Service - Mail, Registered Post, Parcel, Speed Post, Courier - meaning
Unit 5: Emerging Modes of Business	Business Process Outsourcing (BPO): Concept, need and scope
Unit 6: Social Responsibility of Business and Business Ethics	Business Ethics - Concept and Elements

Part B: Finance and Trade

Unit	Topic deleted
Unit 7: Sources of Business Finance	Borrowed funds: Inter Corporate Deposits (ICD) – Concept
Unit 9: Internal Trade	Types of retail-trade-Itinerant and small scale fixed shops retailers
	GST (Goods and Services Tax): Concept
Unit 10: International Trade	Export trade – Meaning and procedure
	Import Trade - Meaning and procedure
	Documents involved in International Trade: indent, letter of credit, shipping order, shipping bills, mate's receipt (DA/DP)
	World Trade Organization (WTO) meaning and objectives

CLASS–XII

Part A: Principles and Functions of Management

Unit	Topic deleted
Unit 3: Business Environment	Demonetization - concept
	Impact of Government policy changes on business with special reference to liberalization, privatization and globalization in India
Unit 4: Planning	Single use and standing plans. Objectives, Strategy, Policy, Procedure, method Rule, budget and Programme
Unit 5: Organising	Topics Deleted
	Formal and informal organisation- concept
Unit 6: Staffing	Staffing as a part of Human Resource Management concept
Unit 7: Directing	barriers to effective communication, how to overcome the barriers
Unit 8: Controlling	Relationship between planning and controlling

Part B: Business Finance and Marketing

Unit	Topic deleted
Unit 11: Marketing	Physical Distribution – components and channels of distribution
Unit 12: Consumer Protection	Consumer Protection: importance
	Consumer awareness - Role of consumer organizations and Non-Governmental Organizations (NGOs)

CHEMISTRY (043)

Class XI

S No	Unit	Portion to be Reduced
1	Some Basic Concepts of Chemistry	Nature of matter, laws of chemical combination, Dalton's atomic theory: concept of elements, atoms and molecules.
2	Structure of Atom	Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations
3	Classification of Elements and Periodicity in Properties	Significance of classification, brief history of the development of periodic table,
4	Chemical Bonding and Molecular Structure	--
5	States of Matter: Gases and Liquids	liquefaction of gases, critical temperature, kinetic energy and molecular speeds (elementary idea), Liquid State- vapour pressure, viscosity and surface tension (qualitative idea only, no mathematical derivations)
6	Chemical Thermodynamics	Heat capacity and specific heat capacity, Criteria for equilibrium
7	Equilibrium	hydrolysis of salts (elementary idea), Henderson Equation
8	Redox Reactions	applications of redox reactions
9	Hydrogen	Preparation, properties and uses of hydrogen, hydrogen peroxide - preparation, reactionsand structure and use;
10	s -Block Elements	Preparation and Properties of Some Important Compounds: Sodium Carbonate, Sodium Chloride, Sodium Hydroxide and Sodium Hydrogen carbonate, Biological importance of Sodium and Potassium. Calcium Oxide and Calcium Carbonate and their industrial uses, biological importance of Magnesium and Calcium.
11	Some p -Block Elements	Some important compounds: Borax, Boric acid, Boron Hydrides, Aluminium: Reactions with acids and alkalies, uses. Carbon: uses of some important compounds: oxides. Important compounds of Silicon and a few uses: Silicon Tetrachloride, Silicones, Silicates and Zeolites, their uses.
12	Organic Chemistry: Some basic Principles and Techniques	methods of purification, qualitative and quantitative analysis
13	Hydrocarbons	free radical mechanism of halogenation, combustion and pyrolysis.
14	Environmental Chemistry	Entire chapter

Practical

The following portion to be deleted

C. Experiments based onpH

a) Any one of the following experiments:

● Determination of pH of some solutions obtained from fruit juices, solution of known and varied concentrations of acids, bases and salts using pH paper or universal indicator.

● Comparing the pH of solutions of strong and weak acids of same concentration.

● Study the pH change in the titration of a strong base using universal indicator.

b) Study the pH change by common-ion in case of weak acids and weak bases.

D. Chemical Equilibrium

One of the following experiments:
a) Study the shift in equilibrium between ferric ions and thiocyanate ions by increasing/decreasing the concentration of either of theions.

b) Study the shift in equilibrium between $[Co(H2O)6]2+$ and chloride ions by changing the concentration of either of theions.

CLASS -XII

S No	Unit	Portion to be Reduced
1	Solid State	Electrical and magnetic properties. Band theory of metals, conductors, semiconductors and insulators and n and p type semi conductors.
2	Solutions	Abnormal molecular mass, Van't Hoff factor
3	Electrochemistry	Lead accumulator, fuel cells, corrosion, law of electrolysis (elementary idea), dry cell- electrolytic cells and Galvaniccells,
4	Chemical Kinetics	Concept of collision theory (elementary idea, no mathematical treatment), activation energy, Arrhenius equation.
5	Surface Chemistry	emulsion - types of emulsions, catalysis: homogenous and heterogeneous, activity and selectivity of solid catalysts; enzyme catalysis,
6	General Principles and Processes of Isolation of Elements	Entire unit
7	p-Block Elements	Preparation and properties of Phosphine, Sulphuric Acid: industrial process of manufacture, Oxides of Nitrogen (Structure only); Phosphorus - allotropic forms, compounds of Phosphorus: Preparation and properties of Halides and Oxo acids (elementary idea only).
8	d and f Block Elements	Chemical reactivity of lanthanoids, Actinoids -Electronic configuration, oxidation states and comparison with lanthanoids. Preparation and properties of $KMnO_4$ and $K_2Cr_2O_7$
9	Coordination Compounds	Structure and stereoisomerism, importance of coordination compounds (in qualitative analysis, extraction of metals and biological system).
10	Haloalkanes and Haloarenes	Uses and environmental effects of -dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT.
11	Alcohols, Phenols and Ethers	uses with special reference to methanol and ethanol.
12	Aldehydes, Ketones and Carboxylic Acid	---
13	Amines	Diazonium salts: Preparation, chemical reactions and importance in synthetic organic chemistry.

14	Biomolecules	Oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen), importance of carbohydrates. Vitamins– classification and functions. Enzymes. Hormones - Elementary idea excluding structure.
15	Polymers	entire chapter
16	Chemistryin Everydaylife	entire chapter

Practical

Following portions should be considered deleted.

A.   Surface Chemistry

a.   Preparation of one lyophilic and one lyophobic sol Lyophilic sol - starch, egg albumin and gum Lyophobic sol - aluminium hydroxide, ferric hydroxide, arsenous sulphide.

b.   Dialysis of sol-prepared in (a)above.

c.   Study of the role of emulsifying agents in stabilizing the emulsion of different oils.

B.   Chemical Kinetics

a.   Effect of concentration and temperature on the rate of reaction between Sodium Thiosulphate and Hydrochloric acid.

b.   Study of reaction rates of any one of the following:

i)   Reaction of Iodide ion with Hydrogen Peroxide at room temperature using different concentration of Iodideions.

ii)   Reaction between Potassium Iodate, (KIO_3) and Sodium Sulphite: (Na_2SO_3)using starch solution as indicator (clock reaction).

C.   Thermo chemistry Any one of the following experiments

i)   Enthalpy of dissolution of Copper Sulphate or Potassium Nitrate.

ii)   Enthalpy of neutralization of strong acid (HCl) and strong base(NaOH).

iii)   Determination of enthaply change during interaction (Hydrogen bond formation) between Acetone and Chloroform.

D.   Electrochemistry Variation of cell potential in Zn/Zn 2+|| Cu2+/Cu with change in concentration of electrolytes ($CuSO_4$ or $ZnSO_4$) at room temperature.

G.   Preparation of Organic Compounds Preparation of any one of the following compounds

i)   Acetanilide

ii)   Di-benzal Acetone

iii)   p-Nitroacetanilide

Aniline yellow or 2 - Naphthol Anilinedye

ECONOMICS (Code No. 030)

CLASS – XI

Part A: Statistics for Economics

Unit	Topics Deleted
Unit 3: Statistical Tools and Interpretation	**Measures of Dispersion** - (range, quartile deviation, mean deviation and); (co-efficient of range, co-efficient of quartile-deviation, co-efficient of mean deviation, **Correlation** –Spearman's rank correlation. **Index Numbers** - index of industrial production

Part B: Introductory Microeconomics

Unit	Topics Deleted
Unit 4: Introduction	concepts of production possibility frontier and
Unit 6: Producer Behaviour and Supply	Producer's equilibrium-meaning and its conditions in terms of marginal revenue-marginal cost.
Unit 7: Forms of Market and Price Determination under Perfect Competition with simple applications	Other Market Forms - monopoly, monopolistic competition - their meaning and features

CLASS - XII

Part A: Introductory Macroeconomics

Unit	Topics Deleted
Unit 2: Money and Banking	Control of Credit through Bank Rate, CRR, SLR, Repo Rate and Reverse Repo Rate, Open Market Operations, Margin requirement.
Unit 5: Balance of Payments	Balance of payments deficit-meaning. Determination of exchange rate in a free market.

Part B: Indian Economic Development

Unit	Topics Deleted
Unit 7: Current challenges facing Indian Economy	Growth of Education Sector in India alternative farming - organic farming **Infrastructure**: Energy

Deleted Topics – Class - XI – English Core

Deleted Topics

Writing

- **Classified Advertisements,**
- **Letters to the editor (giving suggestions/opinions on an issue) Provide realistic context in the form of newspaper report/article to which the students may respond.**
- **Application for a job with a bio-data or résumé**
- **Article & Report Writing**
- **Narrative**

Grammar

- **Modals**
- **Clauses**
- **Change of Voice**
- **Error Correction, editing task/cloze passages**

Literature

Hornbill
- ***Father To Son***
- ***The Adventure***

Snapshots
- ***The Ghat of the Only World***
- ***The Tale of Melon City***

Deleted Topics – Class - XII – English Core

Reading

Note Making & Summarizing

Literature

FLAMINGO

1. Poets and Pancakes
2. The Interview
3. Going Places

1. A Roadside Stand

VISTAS

1. The Tiger King
2. Journey to the end of the Earth
3. Memories of Childhood

Writing

- Poster making

- Business or official letters for making enquiries, registering complaints, asking for and giving in orders and sending replies.

- Speech, Debate

History (027)
2020-2021

Class XI
THEMES IN WORLD HISTORY

S N	Topics	Theme	Deleted Portion
1	Early Societies	Theme-1	Complete Chapter
2	Nomadic Empires	Theme-5	Complete Chapter
3	Confrontation of Cultures	Theme-8	Complete Chapter
	No Change in Map Work		

Class XII-

THEMES IN INDIAN HISTORY

S. N	Topics	Theme	Deleted Portion
1	Through the Eyes of Travellers	Theme-5 Part-II	Complete Chapter
2	Peasants, Zamindars And the State	Theme-8 Part-II	Complete Chapter
3	Colonialism and The Countryside	Theme 10 Part-III	A Revolt in The Countryside -The Bombay Deccan (Uniit-3), The Deccan Riots Commission (Unit-4) **From Page No-275-285 - Deleted**
4	Colonial Cities	Theme-12 Part-III	Complete Chapter
5	Understanding Partition	Theme-14 Part-III	Complete Chapter
	No Change in Map Work		

DEDUCTED PORTION

Informatics Practices - 065

Class XI

Topics
Unit 3: Data Handling using NumPy Data and its purpose, importance of data, structured and unstructured data, data processing cycle, basic statistical methods for understanding data - mean, median, mode, standard deviation and variance. Introduction to NumPy library, NumPy arrays and their advantage, creation of NumPy arrays; indexing, slicing, and iteration; concatenating and splitting array Arithmetic operations on one Dimensional and two Dimensional arrays. Calculating max, min, count, sum, mean, median, mode, standard deviation, variance on NumPy arrays.
Unit 4: Database concepts and the Structured Query Language , foreign key. DROP TABLE, ALTER TABLE. , UPDATE, DELETE
5.2 Numpy Program To create an array of 1D containing numeric values 0 to 9. To create a NumPy array with all values as 0. To extract values at odd numbered position from a NumPy array. To create a 1-D array having 12 elements using arange(). Now, convert this array into a 2-D array with size 4X3. To perform basic arithmetic operations on 1D and 2D array . 5.3 Data Management: SQL Commands To delete the details of a student in the above table. To increase marks by 5% for those students who have Rno more than 20. To add a new column email in the above table with appropriate data type. To add the email ids of each student in the previously created email column.

CLASS XII

Topics
Unit-1 Data handling using Pandas – II
Descriptive Statistics: max, min, count, sum, mean, median, mode, quartile, Standard deviation, variance.
Data Frame operations: Aggregation, group by, Sorting, Deleting and Renaming Index, Pivoting.
Handling missing values – dropping and filling.
Importing/Exporting Data between MySQL database and Pandas.
Data Visualization
, pie chart, frequency polygon, box plot and scatter plot.
: color, style (dashed, dotted), width;
4. Unit Wise syllabus ; Joining, Merging and Concatenation.   Unit 2:   Database Query using SQL

Practical
 	
    □ Create a data frame based on ecommerce data and generate descriptive statistics (mean, median, mode, quartile, and variance)
    □ Create a data frame for examination result and display row labels, column labels data types of each column and the dimensions
    □ Filter out rows based on different criteria such as duplicate rows.
    □ Find the sum of each column, or find the column with the lowest mean.
    □ Locate the 3 largest values in a data frame.
    □ Subtract the mean of a row from each element of the row in a Data Frame.
    □ Replace all negative values in a data frame with a 0.
    □ Replace all missing values in a data frame with a 999.
    □ Importing and exporting data between pandas and CSV file
    □ Importing and exporting data between pandas and MySQL database
    □ 5.3 Data Management
    □ Create a new table (order ID, customer Name, and order Date) by joining two tables (orderID, customer ID, and order Date) and (customer ID, customer Name, contact Name, country).
    □ Create a foreign key in one of the two tables mentioned above
    □ Create a new table (name, date of birth) by joining two tables (student id, name) and (student id, date of birth).
 	
5.4 Introduction to Computer Networks
    □ Download, install and configure browser.

UNIT/ CHAPTER	SYLLABUS REDUCED
Unit- I: Sets and Functions	
1.Sets	☐ Difference of sets. ☐ Complement of a set. Properties of Complement
2.Relations & Functions	☐ (up to RXRXR). ☐ Sum, Difference, product and quotients of functions
3. Trigonometric Functions	☐ General Solutions of trigonometric equations of the type siny=sina, cosy=cosa and tany= tana.
Unit II: Algebra	
1.Principle of Mathematical Induction	☐ Delete full chapter
2.Complex Numbers and Quadratic Equations	☐ Polar representation of complex numbers. ☐ Square root of a complex number.
3.Linear Inequalities	Nil
4. Permutations and Combinations	☐ Derivationof formulae for $^nP_r$and^nC_r
5.Binomial theorem	☐ Delete full Chapter
6. Sequence and Series	☐ Formulae for the following special sums $\sum k, \sum k^2, \sum k^3$.
Unit III: Coordinate geometry	
1.Straight Lines	☐ Shifting of origin. ☐ Equation of family of lines passing through the point of intersection of two lines.
2 Conic sections	☐ a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section.
3.Introduction to Three-dimensional Geometry	Nil
Unit-IV : Calculus	
1.Limits and Derivatives	Nil
Unit-V : Mathematical Reasoning	
1.Mathematical Reasoning	☐ Delete full chapter
Unit-VI: Statistics and Probability	

1. Statistics	☐ Analysis of frequency distributions with equal means but different variances.
2. Probability	☐ Axiomatic (set theoretic) probability, connections with other theories of earlier classes

CLASS XII

UNIT/CHAPTER	SYLLABUS REDUCED
Unit1: Relations and Functions	
1. Relations and Functions	☐composite functions, inverse of a function.
2. Inverse Trigonometric Functions	☐Graphs of inverse trigonometric functions ☐Elementary properties of inverse trigonometric functions
Unit2: Algebra	
1. Matrices	☐existence of non-zero matrices whose product is the zero matrix. ☐Concept of elementary row and column operations. ☐proof of the uniqueness of inverse, if it exists.
2. Determinants	☐properties of determinants ☐Consistency, inconsistency and number of solutions of system of linear equations by examples,
Unit-III: Calculus	
1. Continuity and Differentiability	☐ Rolle's and Lagrange's Mean Value Theorems (without proof) and their geometric interpretation.
2. Applications of Derivatives	☐ rate of change of bodies, use of derivatives in approximation ☐
3. Integrals	$\int \sqrt{ax2 + bx + c}$ dx, $\int (ax + b)\sqrt{ax2 + bx + c}$ dx ☐Definite integrals as a limit of a sum
4. Applications of the Integrals	☐Area between any of the two above said curves
5. Differential Equations	☐formation of differential equation whose general solution is given. ☐ Solutions of linear differential equation of the type: $\frac{dx}{dy}$+px=q,where p and q are functions of y or constants.
Unit-IV: Vectors and Three-Dimensional Geometry	
1. Vectors	scalar triple product of vectors.
2. Three - dimensional Geometry	☐Angle between (i) two lines, (ii) two planes, (iii) a line and a plane

Unit-V: Linear Programming	
1. Linear Programming	☐ mathematical formulation of L.P. problems ☐ (unbounded)
Unit-VI: Probability	
1. Probability	☐ mean and variance of random variable. Binomial probability distribution.

Unit I Planning in Sports

☐ Intramural & Extramural – Meaning, Objectives & Its Significance
☐ Specific Sports Programme (Sports Day, Health Run, Run For Fun, Run For Specific Cause & Run For Unity)

Unit III Yoga & Lifestyle

☐ Back Pain: Tadasana, Ardh Matsyendrasana, Vakrasana, Shalabhasana, Bhujangasana

Unit IV Physical Education & Sports for CWSN (Children With Special Needs - Divyang)

☐ Advantage of Physical Activities for children with special needs

Unit V Children & Women in Sports

☐ Special consideration (Menarch & Menstural Disfunction)
☐ Female Athletes Triad (Oestoperosis, Amenoria, Eating Disorders)

Unit VI Test & Measurement in Sports

o General Motor Fitness–Barrow three item general motor ability(Standing Broad Jump, Zig Zag Run, Medicine Ball Put – For Boys: 03 Kg & For Girls: 01Kg)

Unit VII Physiology & Injuries in Sports

● Physiological changes due to ageing

Unit VIII Biomechanics & Sports

● Friction &Sports

Unit IX Psychology & Sports

● Exercise Adherence; Reasons to Exercise, Benefits of Exercise
● Strategies for Enhancing Adherence to Exercise

Unit X Training in Sports

● Circuit Training - Introduction & its importance

Practical
Record file shall include

Practical-3: Procedure for administering Senior Citizen Fitness Test for 5 elderly family members.

DELETED PORTION

PHYSICS - 042

CLASS XI

Topics
Chapter–1: Physical World Physics-scope and excitement; nature of physical laws; Physics, technology and society (To be discussed as a part of Introduction and integrated with other topics)
Chapter-3 : Motion in a straight line Frame of reference, Motion in a straight line: Position-time graph, speed and velocity
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
Chapter-7 System of Particles and Rotational Motion Statement of parallel and perpendicular axes theorems and their applications.
Chapter-8 Gravitation Kepler's laws of planetary motion, Acceleration due to gravity
Chapter-9 Mechanical Properties of Solids Elastic behaviour, shear modulus of rigidity, Poisson's ratio; elastic energy.
Chapter-11 Thermal properties matter Heat, temperature, Heat transfer-conduction, convection and radiation
Chapter-12 Thermodynamics Heat engine and refrigerator.
Chapter-15 Waves fundamental mode and harmonics, Doppler effect.
Practicals: No investigatory project and Activity to be demonstrated 8 experiments (clubbed based on skills) in place of 12

CLASS XII

Topis
Chapter-1 Electric charges and fields uniformly charged thin spherical shell (field inside and outside).
Chapter-3 Current Electricity Carbon resistors, colour code for carbon resistors; series and parallel combinations of resistors
Chapter-4 Moving Charges and Magnetism Cyclotron
Chapter-5 Magnetism and Matter magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis, torque on a magnetic dipole (bar magnet) in a uniform magnetic field; Para-, dia- and ferro - magnetic substances, with examples. Electromagnets and factors affecting their strengths, permanent magnets.
Chapter-7 Alternating Current power factor, wattless current.
Chapter 8 Electromagnetic Waves Basic idea of displacement current,
Chapter 9 Ray Optics and Optical Instruments Reflection of light, spherical mirrors,(recapitulation) mirror formula , Scattering of light - blue colour of sky and reddish appearance of the sun at sunrise and sunset. resolving power of microscope and astronomical telescope, polarisation, plane polarised light, Brewster's law, uses of plane polarised light and Polaroids.
Chapter-11 Dual Nature of radiation and matter Davisson-Germer experiment

Chapter 13 Nuclei

Radioactivity, alpha, beta and gamma particles/rays and their properties; radioactive decay law, half life and mean life

binding energy per nucleon and its variation with mass number |
| **Chapter 14** Semiconductor Electronics: Materials, Devices and Simple Circuits

Zener diode and their characteristics, zener diode as a voltage regulator. |
| Practicals: No investigatory project and Activity to be demonstrated

8 experiments (clubbed based on skills) in place of 12 |

Political Science - 028

Class XI

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Book I: Indian Constitution at Work	
UNIT	**TOPICS**
6	Federalism (Completely Deleted)
7	Local Governments **These topics are deleted from this unit:** Why do we need Local Governments? Growth of Local Government in India.
Book II: Political Theory	
13	Citizenship (Completely Deleted)
14	Nationalism (Completely Deleted)
15	Secularism (Completely Deleted)

Class XII

Book I: Contemporary World Politics	

UNIT	TOPICS
6	Security in the Contemporary World (Completely Deleted)
7	Environment and Natural Resources (Completely Deleted)

Book II: Politics in India since Independence	

10	Planned Development **These topics are deleted from this unit:** Changing nature of India's economic development Planning Commission and Five-year Plans
11	India's Foreign Policy **These topics are deleted from this unit:** India's Relations with its Neighbour's: Pakistan, Bangladesh, Nepal, Sri Lanka and Myanmar.
14	Social and New Social Movements in India (Completely Deleted)
15	Regional Aspirations (Completely Deleted)