

NISHAN – E – SIKHI INTERNATIONAL SCHOOL, KHADUR SAHIB
SYLLABUS OF COMPUTER
SESSION (2021-22)
CLASS +1(COMMERCE)

TERM1

Unit 1:Microsoft office tools:

.Microsoft Excel, Microsoft word

Unit 2-E-commerce:

Definition of e- commerce, types of e- commerce, advantages and disadvantages, applications and functions of e- commerce.

TERM2

Unit 3:Accountancy-

Working with tally software

Unit 4: Society, Law and Ethics - Cyber safety

Cyber safety: safely browsing the web, identity protection, confidentiality, social networks, cyber troll sand bullying

Appropriate usage of social networks: spread of rumours, and common social networking sites and specific usage rules.

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

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

ECONOMICS

10+1

Term-1

Statistics for Economics

Ch-1 Concept of economics and significance in economics

Ch-2 Collection of data

Ch-3 Census and sample method of collection of data

Ch-4 Organization of data

Ch-5 Presentation of data- textual and tabular presentation

Ch-9 Measure of central tendency –Arithmetic mean

Ch-10 Measure of central tendency- Median and Mode

INTRODUCTORY MICROECONMICS

Ch-1 Economics and Economy

CH-2 Central problem of an economy

Ch-3 Consumer equilibrium –Utility Analysis

Ch-4 Consumer equilibrium – Indifference Curve Analysis

Ch-5 Theory of demand

Ch-6 Price Elasticity of demand

Ch-7 Production functions and return to a factor

PT-1 Ch-1 Concept of economics and significance in economics

Ch-1 Economics and Economy

PT-2 : Ch-2 Collection of data

CH-2 Central problem of an economy

TERM-2

Statistics for economics

Ch-6 Diagrammatic presentation of data – Bar Diagrams and pie diagrams

Ch-7 Frequency Distribution – Histogram, polygon and Ogive

Ch-8 Arithmetic line-Graph- time series graph

Ch-11 Measures to Dispersion

Ch-12 Correlation

Ch-13 Index Number

INTRODUCTORY MICROECONMICS

Ch-8 Concept of Cost

Ch-9 Concept of Revenue

Ch-10 Producer Equilibrium

Ch-11 Theory of Supply

Ch-12 Forms of Market

Ch-13 Market Equilibrium under perfect Competition and effects of shift in demand and supply

PT-3 : Ch-12 Correlation

Ch-8 Concept of Cost

PT-4: Ch-6 Diagrammatic presentation of data – Bar Diagrams and pie diagrams

Ch-9 Concept of Revenue

PROJECT WORK- 1. Concept of cost

2. Poverty

ART INTEGRATION

SR.NO:-	ART ACTIVITY
4.1.1.1.9	USE OF VARIOUS MEDIA-PPT, CHART, SCRAP FILES ETC <ul style="list-style-type: none">• Chart showing poverty and its causes.• Ppt on comparative development experiences of India and its neighbors. CORREALTION WITH HOME SCIENCE <ul style="list-style-type: none">• Various problems of rural infrastructure in India. COLLAGE AND MOSAIC WORK <ul style="list-style-type: none">• Basic sources of generating power. VIDEO/FILM MAKING <ul style="list-style-type: none">• Visit to Bank

- Visit to any factory (If they allow making of video)

PAINTINGH AND CARTOONING

- Any scene of bank, company, stock exchange etc.

DETAIL TALKS / LECTURES

- Discussion on Current Budget
- The students who lack confidence in speaking in front of other students, should be given the task of explaining a simple topic, as member of the group

ANY OTHER FORM NOT LISTED ABOVE

- Colorful mind maps
- Handmade colorful crossword puzzles
- Quizzes etc.

NISHAN-E-SIKHI INTERNATIONAL SCHOOL, KHADUR SAHIB

SYLLABUS CLASS 11 ENGLISH

FIRST TERM

Chapter 1: The Portrait of a lady

Chapter 2: We're Not Afraid to Die...if We Can All Be Together

Chapter 3: Discovering Tut: The Saga Continues

Chapter 4: Landscape of the Soul

Poem - A Photograph

Poem - The Laburnum Top

Poem - The Voice of the Rain

Snapshot

Chapter 1 - The Summer of the Beautiful White Horse

Chapter 2 - The Address

Chapter 3 - Ranga's Marriage

Chapter 4 - Albert Einstein at School

Error Correction, editing tasks/cloze passages

Re - ordering of sentences,

notice/ poster/ advertisement

Letters

PT 1

Chapter 1: The Portrait of a lady

Chapter 1: The summer of the beautiful white horse

Poem - A Photograph

PT 2

Chapter 2: We're Not Afraid to Die...if We Can All Be Together

Chapter 2: The Address

Poem - The Laburnum Top

ART INTEGRATED ACTIVITY

Sketching related to surrounding in association with lessons and poetry

TERM 2

Chapter 5: The Ailing Planet

Chapter 6: The Browning Version

Chapter 7: The Adventure

Chapter 8: Silk Road

Poem – Childhood

Poem - Father to Son

Snapshot

Chapter 5 - Mother's Day

Chapter 6 - The Ghat of the Only World

Chapter 7 – The Birth

Chapter 8- The Tale of Melon City

Transformation of sentences

article/speech/report/

narrative/debate writing

PT3

Chapter 5: The Ailing Planet

Chaptet 5: The Mother's day

Poem – Childhood

PT 4

Chapter 6: The Browning Version

Chapter 6: The Ghat of the Melon city

Poem - Father to Son

ART INTEGRATED ACTIVITY

Play

PROJECT

To collect photographs of various writers and write introduction with their work

NOTE: FINAL TERM WILL COVER THE WHOLE SYLLABUS

Nishan -E-Sikhi International School, Khadur Sahib

Session 2020-21

Syllabus for class XI

Subject :-Mathematics

Blue Print: Written exam : 80 marks

Marks	Number of Questions	Total
1 mark (V.Short questions)	16	$1 \times 16 = 16$
1 mark (Case study based MCQ)	8	$1 \times 8 = 8$
2 mark	10	$2 \times 10 = 20$
3 mark	7	$3 \times 7 = 21$
5 mark	3	$5 \times 3 = 15$

Internal Assessment: 20 marks

Periodic test - 10 marks

Mathematics Activities - 10 marks

TERM -1

Periodic test 1: Chapter -1 (Sets)

Chapter- 5(complex numbers and quadratic equations)

Periodic test 2: Chapter-3(Trigonometric Functions)

Chapter No.	Name of Chapter
1	Sets
2	Relations and Functions
3	Trigonometric Functions
4	Principle of mathematical Induction
5	Complex numbers and Quadratic Equations

6	Linear Inequalities
7	Permutation and Combination
8	Binomial Theorem

Activities

1. To represent set theoretic operations using Venn diagrams.
2. To distinguish between a Relation and a Function.
3. To plot graphs of $\sin x$, $\sin 2x$, $2 \sin x$ and $\sin \frac{x}{2}$ using same co-ordinate axis.
4. To construct a Pascal's Triangle and to write binomial expansion for a given positive integral Exponent.
5. To verify that graph of given inequality say, $5x + 4y - 40 < 0$, of the form $ax + by + c < 0$, $a, b > 0, c < 0$ Represent only one of the two half planes.

TERM -2

Periodic test 3: Chapter-12(Introduction to Three-dimensional geometry)

Chapter-10 (Straight Lines)

Periodic test 4: Chapter-13 (Limits and Derivatives)

Chapter No.	Name of chapter
9.	Sequence and Series
10.	Straight Lines
11.	Conic Sections
12.	Introduction to Three- dimensional Geometry
13.	Limits and Derivatives
14.	Mathematical Reasoning
15.	Statistics
16.	Probability

Activities

1. To demonstrate that Arithmetic mean of two different positive numbers is always greater than geometric mean.

2.To find analytically , $\lim_{x \rightarrow c} f(x) = \frac{x^2 - c^2}{x - c}$.

3.To construct a parabola.

4.To write sample space , when die is rolled once, twice _ _ _ _ _.

5. To write the sample space, when a coin is tossed once, two times, three times, four times.

NOTE: First term syllabus will be included in second term.

ART INTEGRATION

SR.NO:-	ART ACTIVITY
4.1.1.1.7	USE OF VARIOUS MEDIA-PPT, VIDEO MAKING, CHART ETC. <ul style="list-style-type: none"> Chart showing Domain & range of T- functions Chart of various formulas of derivatives & Trigonometry PPT or video showing various 3-D Planes ,its complete analysis and equations PPT or video showing graphs of different functions Animated video showing shapes of different graphs (hands of dancing cartoon)
4.1.1.1.8	USE OF COLOURS , DRAWING TOOLS, COLORFUL SHEETS, THREAD, WIRE & GRAPH WORK <ul style="list-style-type: none"> Project files showing different graphs of T- functions & using different colors, wire or thread. Project files showing different Venn diagrams of operations on sets using paper cutting, wire, threads or any waste material.
4.1.4.4	CORREALTION WITH DAILY LIFE <ul style="list-style-type: none"> To analyze the real life problem related to statistic and to solve it using different statistical techniques.. To solve the practical problem related to probability. DESIGNING THE SCHOOL MAGAZINE ,BULLETIN BOARDS,POSTERS <ul style="list-style-type: none"> Chart & flash cards showing important formulas to remember. Posters of various mathematicians and their life history or achievements to be publish in school magazine or on bulletin board. Celebration of World's Mathematics day on 22 dec

	ANY OTHER FORM NOT LISTED ABOVE <ul style="list-style-type: none">• Colorful mind maps• Handmade colorful crossword puzzles• Quizzes• Flash Cards• Magic box , wall hangings , etc.
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NISHAN - E – SIKHI INTERNATIONAL SCHOOL

Syllabus of Physical Education

Class 11th

Term – 1

- **UNIT 1** - Changing Trends and career in Physical Education
- Meaning and definition of physical education
- Aim and objectives of physical education
- Career options in physical education
- Competitions in various sports at national and international level
 Khelo India Programme
- **UNIT 2** - Olympic Value Education
- Olympics, Paralympics and Special Olympics
- Olympic Symbols , Ideals , Objectives and value of Olympism
- International Olympic Committee
- Indian Olympic Association
- **UNIT 3** -Physical Fitness , wellness and lifestyle
- Meaning and importance of physical fitness, wellness and lifestyle
- Components of physical fitness and wellness, Components of health related fitness
- **UNIT 4** - Physical Education and sports for CWSN (Children with Special Needs)
- Aim and objectives of Adaptive physical education
- Organization Promoting Adaptive Sports(Special Olympics Bharat , Paralympics, Deaflympics)
- Concept of Inclusion, its need and implementation
- Role of various professional for children with special needs
(counselor , occupational therapist, physiotherapist , physical education teacher , speech therapist and special educator)
- **UNIT 5**- Yoga
- Meaning and importance of yoga
- Elements of yoga
- Introduction – Asanas , Pranayama , Meditation and yogic kriyas

- Yoga for concentration and related Asanas [Sukhasanas , Tadasanas , Padamasanas , Shashankasanas , Naukasanas , Vrikshasanas (tree pose) , Garudasanas (eagle pose)]
- Relaxation techniques for improving concentration – yogic nidra

PT -1

- **UNIT 1** – Changing trends and career in physical education
- **UNIT 2** – Olympic value education

PT -2

- **UNIT 3** – Physical fitness , wellness and lifestyle
- **UNIT 4** – Physical education and sports for CWSN (Children with special needs – Divyang)
- **UNIT 5**- Yoga

TERM - 2

- **UNIT 6** - Physical activity and leadership training
- Leadership qualities and role of a leader
- Creating leaders through physical education
- Meaning , objectives and types of adventure sports (rock climbing , trekking , river rafting , mountaineering , surfing and paragliding)
- Safety measures to prevent sports injuries
- **UNIT 7** – Test measurement and evaluation
- Define test , measurement and evaluation
- Importance of test , measurement and evaluation in sports
- Calculation of BMI and Waist hip ratio
- Somato types (endomorphs, mesomorphs , ectomorphs)
- Measurement of health related fitness
- **UNIT 8** –Fundamental of anatomy , physiology and kinesiology in sports
- Definition and importance of anatomy , physiology and kinesiology

- Properties and functions of muscles
- Function and structure of respiratory system and circulatory system
- Equilibrium – dynamic and static and centre of gravity and its application in sports
- **UNIT 9** – Psychology and sports
- Definition and importance of psychology in physical education and sports
- Define and differentiate between growth and development
- Development characteristics at different stages of development
- Adolescent problems and their management
- **UNIT 10** – Training and doping in sports
- Meaning and concept of sports training
- Principles of sports training
- Warming up and limbering down
- Skill, technique and style
- Concept and classification of doping
- Prohibited substances and their side effects
- Dealing with alcohol and substance abuse

PT - 3

- **UNIT 6** - Physical activity and leadership training
- **UNIT 7** – Test measurement and evaluation

PT – 4

- **UNIT 8** – Fundamental of anatomy, physiology and kinesiology in sports
- **UNIT 9** – Psychology and sports
- **UNIT 10** – Training and doping in sports

ART INTEGRATION PROJECT FOR TERM 1

SR.NO.	CLASS	ACTIVITY	CODE
1.	1 st TO 12 th	P.T Exercise	4.4.2.1
2.	6 th TO 8 th	Prepare a chart on your game	4.1.1.1.8
3.	9 th TO 12 th	Sewa project	4.1.1.1.8

ART INTEGRATION PROJECT FOR TERM 2

SR.NO.	CLASS	ACTIVITY	CODE
1.	1 st TO 12 th	Warming up	4.4.2.1
2.	6 th TO 8 th	Slogan making on sports day	4.1.1.1.8
3.	9 th TO 12 th	Sewa project	4.1.1.1.8

ਨਿਸ਼ਾਨਏ ਸਿੱਖੀ ਇੰਟਰਨੈਸ਼ਨਲ ਸਕੂਲ

ਜਮਾਤ-ਗਿਆਰ੍ਹਵੀਂ

ਵਿਸ਼ਾ - ਪੰਜਾਬੀ

ਸਿਲੇਬਸ ਅਪ੍ਰੈਲ 2021 ਤੋਂ ਮਾਰਚ 2022

ਸਤਰਪਹਿਲੀ

●ਭਾਸ਼ਾ

ਅਣਡਿੱਠਾਪੈਰਾ

ਅਖਬਾਰ ਦੇ ਸੰਪਾਦਕ ਨੂੰ ਪੱਤਰ

ਸਮਾਜਿਕ, ਸਭਿਆਚਾਰਕ ਅਤੇ ਮਨੋਰੰਜਨ ਵਿਸ਼ੇ ਸੰਬੰਧੀ ਲੇਖ

ਅੰਗਰੇਜ਼ੀ ਤੋਂ ਪੰਜਾਬੀ ਅਨੁਵਾਦ

ਮੁਹਾਵਰੇ

●ਪੰਜਾਬੀਲੋਕਸਾਹਿਤ

ਲੋਕਗੀਤ (ਸੁਹਾਗ, ਘੋੜੀਆਂ, ਸਿੱਠਣੀਆਂ, ਟੱਪਾ)

ਦੰਤ ਕਥਾਵਾਂ

ਪੀ. ਟੀ 3

ਮੁਹਾਵਰੇ

ਸੁਹਾਗ

ਪ੍ਰਹਿਲਾਦ ਭਗਤ

ਪੀ ਟੀ 4

ਦਫ਼ਤਰੀ ਸ਼ਬਦਾਵਲੀ

ਘੋੜੀਆਂ

ਨੀਲ ਕਮਲ

ਸਤਰਦੂਜੀ

●ਭਾਸ਼ਾ

ਅਣਡਿੱਠਾਪੈਰਾ

ਅਖਬਾਰਦੇਸੰਪਾਦਕਨੂੰਪੱਤਰ

ਸਮਾਜਿਕ, ਸਭਿਆਚਾਰਕ ਅਤੇ ਮਨੋਰੰਜਨ ਵਿਸ਼ੇ ਸੰਬੰਧੀ ਲੇਖ

ਅੰਗਰੇਜ਼ੀ ਤੋਂ ਪੰਜਾਬੀ ਅਨੁਵਾਦ

ਮੁਹਾਵਰੇ

ਇਸਤਿਹਾਰ/ਸੱਦਾ-ਪੱਤਰ

●ਪੰਜਾਬੀਲੋਕਸਾਹਿਤ

ਲੋਕਗੀਤ (ਬੋਲੀਆਂ, ਢੋਲਾ, ਮਾਹੀਆ, ਬੁਝਾਰਤਾਂ)

ਪ੍ਰੀਤਕਥਾਵਾਂ

ਪੀ.ਟੀ 3

ਬੋਲੀਆਂ

ਮੁਹਾਵਰੇ

ਪੂਰਨ ਭਗਤ

ਪੀ. ਟੀ 4

ਬੈਂਕ, ਰੇਲਵੇ ਨਾਲ ਸਬੰਧਿਤ ਵਾਕ

ਬੁਝਾਰਤਾਂ

ਸਬਜ਼ ਪਰੀ

Class – XI

ACCOUNTANCY (Code No. 055)

Session- 2021-2022

Theory-80 marks

Project Work-20 marks

Blue Print

Mark	Number of Questions
1 mark	20
3 marks	2
4 marks	5
6 marks	3
8 marks	2
Total (80)	32

TERM-1

PERIODIC TEST-1

Chapter-1 Introduction to Accounting

Chapter-2 Theory base of Accounting

Chapter-3 Accounting Equation, Rules of Debit and Credit and Origin of Transactions

PERIODIC TEST- 2

Chapter- 4 Journal

Chapter-5 Accounting for Goods and Service Tax (GST)

Chapter= 6 Ledger

TERM-1: Chapter=1, 2, 3,4,5,6 (Periodic Test I and 2)

Chapter= 7 Subsidiary Books- Cash Books

Chapter-8 Other Subsidiary Books

Chapter-9 Journal Proper

Chapter-10 Trial Balance

PROJECT WORK: Collection of Source Documents and Preparation of vouchers.

TERM -2

PERIODIC TEST-3

Chapter- 12 Depreciation

Chapter-13 Provisions and Reserves

PERIODIC TEST-4

Chapter-14 Bill of exchange

Chapter-17 Financial Statement (with adjustments)

TERM- 2: Included Term 1, Periodic Test – 3 and 4

Chapter-11 Bank Reconciliation Statement

Chapter-16 Financial Statement (without adjustments)

Chapter-17 Financial Statement (with adjustments)

Chapter-18 Accounts from incomplete records

Chapter-19 Introduction to Accounting

Chapter-20 Automation of Accounting Process

PROJECT WORK 2- Comprehensive Project of any sole proprietorship business or company.

ART INTEGRATION

SR.NO:-	ART ACTIVITY
4.1.1.1.8	USE OF VARIOUS MEDIA-PPT, CHART AND SCRAP FILES ETC. <ul style="list-style-type: none">• Chart showing types of accounts with as many examples as students can

	<p>write</p> <ul style="list-style-type: none"> • Chart of detailed classification of types of accounting errors. • PPT on accounting terms. • Scrap files containing maximum numbers of vouchers from the syllabus <p>COLLAGE AND MOSAIC WORK</p> <ul style="list-style-type: none"> • Various notices published by the companies, in newspapers like that of name change mergers, takeovers etc. <p>CORREALTION WITH HOME SCIENCE</p> <ul style="list-style-type: none"> • Opening a bank account <p>PAINTINGH AND CARTOONING</p> <ul style="list-style-type: none"> • Any scene of bank, company, stock exchange etc. <p>VIDEO/FILM MAKING</p> <ul style="list-style-type: none"> • Visit to a bank. • Visit to any factory (If they allow making of video) <p>DETAIL TALKS / LECTURES</p> <ul style="list-style-type: none"> • The students who lack confidence in speaking in front of other students, should be given the task of explaining a simple topic, as member of the group <p>ANY OTHER FORM NOT LISTED ABOVE</p> <ul style="list-style-type: none"> • Colorful mind maps • Handmade colorful crossword puzzles • Quizzes • Flash Cards • Magic box, wall hangings , Riddles etc.
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11th Class Biology syllabus code no. 044

Total marks : 100

Theory marks: 70

Practical marks : 30

Term :1

Periodic test 1

Chapter 1. The living world

Chapter 2. Biological classification

Periodic test 2

Chapter 3. Animal Kingdom

Chapter 4. Morphology of flowering plants

Syllabus

Unit I: Diversity of Living Organisms

- **The Living World:** What Is Living? Three Domains of Life, Biodiversity, Need For Classification, Binomial Nomenclature, Taxonomy and Systematics, Concept of Species and Taxonomical Hierarchy, Tools For Study of Taxonomy Museums, Zoological Parks, Herbaria, Botanical Gardens
- **Biological Classification:** Five Kingdom Classification, Lichens, Viruses and Viroids, Salient Features and Classification of Monera, Protista and Fungi Into Major Groups
- **Plant Kingdom:** Salient Features and Classification of Plants Into Major Groups- Algae, Bryophyta, Pteridophyta, Gymnospermae and Angiospermae, Angiosperms- Classification Upto Class, Characteristic Features and Examples
- **Animal Kingdom:** Salient Features and Classification of Animals, Non-Chordates Up To Phyla Level and Chordates Up To Class Level

Unit II: Structural Organization in Animals and Plants

- **Morphology of Flowering Plants:** Morphology and Modifications, Morphology of Different Parts of Flowering Plants, Root, Stem, Leaf, Inflorescence, Flower, Fruit and Seed
- **Anatomy of Flowering Plants:** Anatomy and Functions of Different Tissues and Tissue Systems
- **Structural Organisation In Animals:** Animal Tissues, Morphology, Anatomy and Functions of Different Systems of An Insect (Cockroach)

PRACTICAL

Particulars	Maximum marks
One Minor Experiment	4
One Major Experiment	5
Slide Preparation	5
Spotting	7
Project Record + Viva Voce	5
Practical Record + Viva Voce	4
Total	30

Practical syllabus : A: List of Experiments

1. Study and describe a locally available common flowering plant, from any one family: Solanaceae or Liliaceae (Poaceae, Asteraceae or Brassicaceae can be substituted in case of particular geographical location) including dissection and display of floral whorls, anther and ovary to show number of chambers (floral formulae and floral diagrams).
2. Study of distribution of stomata in the upper and lower surfaces of leaves.
3. Separation of plant pigments through paper chromatography.
4. Study of the rate of respiration in flower buds/leaf tissue and germinating seeds.
5. Test for presence of sugar in urine.
6. Test for presence of albumin in urine.

B. Study/Observer of the following (spotting)

1. Parts of a compound microscope.
2. Specimens/slides/models and identification with reasons – Bacteria, Oscillatoria, Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen.
3. Virtual specimens/slides/models and identifying features of – Amoeba, Hydra, liverfluke, Ascaris, leech, earthworm, prawn, silkworm, honeybee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit.
4. Tissues and diversity in shape and size of animal cells (squamous epithelium, smooth, skeletal and cardiac muscle fibers and mammalian blood smear) through temporary/permanent slides.
5. Mitosis in onion root tip cells and animal cells (grasshopper) from permanent slides.

Term :2

Syllabus

Periodic test :3

Unit 3

Periodic test 3

Chapter 8 . Cell – the basic unit of life

Chapter 9 . Biomolecules

Periodic test 4

Chapter 15. Plant growth and development

Chapter 16. Digestion and absorption

Syllabus term :2

Unit III: Cell: Structure and Function

- **Cell- The Unit of Life:** Cell Theory, Cell As The Basic Unit of Life, Cell Envelope, Plant and Animal Cell, Cell Membrane, Structure of Prokaryotic and Eukaryotic Cells, Endomembrane System, Cell Wall, Cell Organelles- Structure and Function, Endoplasmic Reticulum, Golgi Bodies, Lysosomes, Vacuoles, Flagella, Centrioles, Nucleus, Mitochondria, Ribosomes, Plastids, Microbodies, Cytoskeleton, Cilia
- **Biomolecules:** Biomolecules, Chemical Constituents of Living Cells, Enzymes- Types, Properties, Enzyme Action, Structure and Function of Proteins, Carbohydrates, Lipids, Nucleic Acids
- **Cell Cycle and Cell Division:** Cell Cycle, Mitosis, Meiosis and Their Significance

Unit IV: Plant Physiology

- **Transport In Plants:** Movement of Water, Gases and Nutrients, Cell To Cell Transport, Active Transport, Long Distance Transport of Water- Absorption, Apoplast, Symplast, Diffusion, Facilitated Diffusion, Plant-Water Relations, Imbibitions, Water Potential, Osmosis, Plasmolysis, Transpiration, Transpiration Pull, Mass Flow Hypothesis, Root Pressure and Guttation, Opening and Closing of Stomata, Uptake and Translocation of Mineral Nutrients- Transport of Food, Phloem Transport
- **Mineral Nutrition:** Essential Minerals, Deficiency Symptoms, Mineral Toxicity, Macro and Micronutrients and Their Role, Hydroponics As A Method To Study Mineral Nutrition, Nitrogen Cycle, Nitrogen Metabolism, Biological Nitrogen Fixation
- **Photosynthesis In Higher Plants:** Photosynthesis As A Means of Autotrophic Nutrition, Factors Affecting Photosynthesis Pigments Involved In Photosynthesis, Photochemical and Biosynthetic Phases of Photosynthesis, Site of Photosynthesis, Chemiosmotic Hypothesis, Cyclic and Non-Cyclic Photophosphorylation, Photorespiration, C₃ and C₄ Pathways
- **Respiration In Plants:** Exchange of Gases, Cellular Respiration- Glycolysis, Fermentation (Anaerobic), Amphibolic Pathways, Energy

Relations- Number of ATP Molecules Generated, TCA Cycle and Electron Transport System (Aerobic), Respiratory Quotient

- **Plant Growth and Development:** Seed Germination, Conditions of Growth, Differentiation, Dedifferentiation and Re-differentiation, Phases of Plant Growth and Plant Growth Rate, Growth Regulators- Auxin, Gibberellin, Cytokinin, Ethylene, ABA, Seed Dormancy, Vernalisation, Photoperiodism, Sequence of Developmental Processes In A Plant Cell

Unit V: Human Physiology

- **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, Diarrhea
- **Breathing and Exchange of Gases:** Respiratory System In Humans, Respiratory Volume, Respiratory Organs In Animals, Mechanism of Breathing and Its Regulation In Humans- Exchange of Gases, Transport of Gases and Regulation of Respiration, Disorders Related To Respiration- Asthma, Emphysema, Occupational Respiratory Disorders
- **Body Fluids and Circulation:** Blood Groups, Composition of Blood, Coagulation of Blood, Human Circulatory System- Structure of Human Heart and Blood Vessels, Composition of Lymph and Its Function, Cardiac Cycle, Cardiac Output, ECG, Double Circulation, Regulation of Cardiac Activity, Coronary Artery Disease, Disorders of Circulatory System- Hypertension, Heart Failure, Angina Pectoris
- **Excretory Products and Their Elimination:** Modes of Excretion- Ammonotelism, Ureotelism, Uricotelism, Human Excretory System- Structure and Function, Urine Formation, Regulation of Kidney Function- Renin- Angiotensin, Atrial Natriuretic Factor, ADH and Diabetes Insipidus, Osmoregulation, Role of Other Organs In Excretion, Disorders- Uraemia, Renal Failure, Renal Calculi, Nephritis, Dialysis and Artificial Kidney, Kidney Transplant
- **Locomotion and Movement:** Skeletal Muscle- Contractile Proteins and Muscle Contraction, Skeletal System and Its Functions, Types of Movement- Ciliary, Flagellar, Muscular, Joints, Disorders of Muscular and Skeletal System- Myasthenia Gravis, Tetany, Muscular Dystrophy, Arthritis, Osteoporosis, Gout
- **Neural Control and Coordination:** Nervous System In Humans- Central, Peripheral and Visceral Nervous System, Generation and Conduction of Nerve Impulse, Neuron and Nerves, Reflex Action, Sense

Organs, Sensory Perception, Elementary Structure and Functions of Eye and Ear

- **Chemical Coordination and Integration:** Endocrine Glands and Hormones, Human Endocrine System- Hypothalamus, Pituitary, Pineal, Thyroid, Parathyroid, Adrenal, Pancreas, Gonads, Mechanism of Hormone Action, Role of Hormones As Messengers and Regulators, Hypo- and Hyperactivity and Related Disorders, Dwarfism, Acromegaly, Cretinism, Goiter, Exophthalmic Goiter, Diabetes, Addison's Disease

BUSINESS STUDIES (Code No. 054)
CLASS–XI (2021-2022)

Theory: 80 Marks
Project: 20 Marks

Blue Print

Mark	Number of Questions
1 mark	20
3 marks	2
4 marks	5
6 marks	3
8 marks	2
Total (80)	32

TERM-1

Ch-1 Evolution and Fundamentals of Business

CH-2 Forms of Business Organisations

CH-3 Public, Private and Global Enterprises

CH-4 Business Services

CH-5 Emerging Modes of Business

PT-1 Ch-1 Evolution and Fundamentals of Business

CH-2 Forms of Business Organisations

PT-2 CH-3 Public, Private and Global Enterprises

CH-4 Business Services

TERM-2

CH-6 Social Responsibility of Business and Business Ethics

CH-7 Sources of Business Finance

CH-8 Small Business and Entrepreneurship Development

CH-9 Internal Trade

CH-10 International Business

PT-3 CH-6 Social Responsibility of Business and Business Ethics

CH-7 Sources of Business Finance

PT-4 CH-8 Small Business and Entrepreneurship Development

CH-9 Internal Trade

Project Work: PROJECT ON STOCK MARKET/ TYPES OF COMPANIES/ PRODUCTS.

ART INTEGRATION

SR.NO:-	ART ACTIVITY
4.1.1.1.9	<p>USE OF VARIOUS MEDIA-PPT, CHART, SCRAP FILES ETC</p> <ul style="list-style-type: none">• Show various persons involved in various economics activities.• Detailed classification of all human activities• PPT on forms of business organizations. <p>CORREALTION WITH HOME SCIENCE</p> <ul style="list-style-type: none">• Various problems of small business. <p>COLLAGE AND MOSAIC WORK</p> <ul style="list-style-type: none">• Sources of business finance <p>VIDEO/FILM MAKING</p> <ul style="list-style-type: none">• Visit to Bank• Visit to any factory (If they allow making of video) <p>PAINTINGH AND CARTOONING</p> <ul style="list-style-type: none">• Any scene of bank, company, stock exchange etc. <p>DETAIL TALKS / LECTURES</p> <ul style="list-style-type: none">• The students who lack confidence in speaking in front of other students, should be given the task of explaining a simple topic, as member of the group <p>ANY OTHER FORM NOT LISTED ABOVE</p> <ul style="list-style-type: none">• Colorful mind maps• Handmade colorful crossword puzzles• Quizzes etc.

CLASS 11th
CHEMISTRY (043)
Max. Marks – 100
Theory : 70 Marks
Practical : 30 Marks
Term – I

Periodic Test – 1

Unit I : Some Basic Concepts of Chemistry

Periodic Test – 2

Unit IV : Chemical Bonding and Molecular Structure

- Unit I: Some Basic Concepts of Chemistry
- Unit II: Structure of Atom
- Unit III: Classification of Elements and Periodicity in Properties

- Unit IV: Chemical Bonding and Molecular structure

- Unit V: States of Matter: Gases and Liquids

- Unit VI: Chemical Thermodynamics

- Unit XII: Organic Chemistry - Some Basic Techniques

PRACTICALS

Evaluation Scheme for Examination	Marks
Volumetric Analysis	08
Salt Analysis	08
Content Based Experiment	06
Project Work	04
Class record and viva	04
Total	30

PRACTICAL SYLLABUS

Micro-chemical methods are available for several of the practical experiments. Wherever possible such techniques should be used:

Basic Laboratory Techniques

1. Cutting glass tube and glass rod
2. Bending a glass tube
3. Drawing out a glass jet
4. Boring a cork

Characterization and Purification of Chemical Substances

1. Determination of melting point of an organic compound.
2. Determination of boiling point of an organic compound.
3. Crystallization of impure sample of any one of the following: Alum, Copper Sulphate, Benzoic Acid.

Quantitative Estimation

- i) Using a chemical balance.
- ii) Preparation of standard solution of Oxalic acid.
- iii) Determination of strength of a given solution of Sodium Hydroxide by titrating it against standard solution of Oxalic acid.
- iv) Preparation of standard solution of Sodium Carbonate.
- v) Determination of strength of a given solution of Hydrochloric acid by titrating it against standard Sodium Carbonate solution.

Qualitative Analysis

- (a) Determination of one anion and one cation in a given salt

Cations- Pb^{2+} , Cu^{2+} , Al^{3+} , Fe^{3+} , Mn^{2+} , Ni^{2+} , Zn^{2+} , Co^{2+} , Ca^{2+} , Sr^{2+} , Ba^{2+} , Mg^{2+} , $[\text{NH}_4]^+$

Anions – $[\text{CO}_3]^{2-}$, S^{2-} , $[\text{SO}_3]^{2-}$, $[\text{SO}_4]^{2-}$, $[\text{NO}_3]^-$, Cl^- , Br^- , I^- , $[\text{PO}_4]^{3-}$, $[\text{C}_2\text{O}_4]^{2-}$, CH_3COO^-

(Note: Insoluble salts excluded)

PROJECT

Scientific investigations involving laboratory testing and collecting information from other sources.

A few suggested Projects

- Checking the bacterial contamination in drinking water by testing sulphide ion.
- Study of the methods of purification of water.s
- Testing the hardness, presence of Iron, Fluoride, Chloride, etc., depending upon the

regional variation in drinking water and study of causes of presence of these ions above permissible limit (if any).

- Investigation of the foaming capacity of different washing soaps and the effect of addition of Sodium Carbonate on it.
- Study the acidity of different samples of tea leaves.
- Determination of the rate of evaporation of different liquids.
- Study the effect of acids and bases on the tensile strength of fibers.
- Study of acidity of fruit and vegetable juices.

Note: Any other investigatory project, which involves about 10 periods of work, can be chosen with the approval of the teacher.

TERM – 2

Periodic Test – 3

Unit 7 : Equilibrium

Unit 8 : Redox Reactions

Periodic Test – 4

Unit 13 : Hydrocarbons

- Unit 7 : Equilibrium
- Unit 8 : Redox Reactions
- Unit 9 : Hydrogen
- Unit 10 : s-Block Elements
- Unit 11 : p-Block Elements
- Unit 13 : Hydrocarbons
- Unit 14 : Environmental Chemistry

PRACTICAL SYLLABUS

Experiments based on pH

(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.

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 the ions.
- b) Study the shift in equilibrium between $[\text{Co}(\text{H}_2\text{O})_6]^{2+}$ and chloride ions by changing the concentration of either of the ions.

Qualitative Analysis

- Detection of -Nitrogen, Sulphur, Chlorine in organic compounds.

ART INTEGRATION

SR. NO.	ART ACTIVITY
4.1.1.1.7	a) Use of various media like ppt, chart and scrap files etc. to illustrate different topics in an easy, innovative and creative manner. b) Painting and cartooning of any scene related to uses of chemical sciences in day-to-day life. c) Collage making of pictures of famous chemists and their contribution to the world by using colorful cuttings from newspapers and magazines. d) Organising Detail talks / Lectures for explaining various topics related to theoretical concepts. e) Colorful flash cards, wall hangings, concept maps, magic box, puzzles etc.
4.1.1.1	Composition and creative expression of musical rhythmic songs to learn difficult topics such as Periodic Table Elements, Naming Reactions in Organic Chemistry, Mathematical Formulae related to Physical Chemistry etc.
4.1.3.1	Use of day-to-day objects to make three-dimensional models of Chemistry such as environmental issues, structures of Hydrocarbons, mole concept, various models of atoms etc.
4.1.5.4	Visit to a pharmaceutical industry, chemist shop, polymer industry, paint industry, Textile industry etc. and making and presenting the report.