

SYLLABUS 2021 - 2022	
CLASS	XII
NAME OF THE SUBJECT	ENGLISH
TEXT BOOKS	1. English Reader – FLAMINGO NCERT 2. English Supplementary Reader – VISTAS NCERT

SYLLABUS:

S. NO.	UNIT / CHAPTER	DISTRIBUTION OF MARKS
	READING	14
	WRITING AND GRAMMAR	8
	LITERATURE	18
	TOTAL	40
	INTERNAL ASSESSMENT	10
	GRAND TOTAL	50

MONTH: AUGUST 2021	PERCENTAGE OF SYLLABUS COVERED: 14 %
VISTAS: THE ENEMY Writing Skills: CLASSIFIED ADVERTISEMENTS ARTICLE WRITING	

MONTH: SEPTEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: 7 %
Revision Assessment of Speaking and Listening Skills	

MONTH: OCTOBER 2021	PERCENTAGE OF SYLLABUS COVERED: 15 %
October	

FLAMINGO:	THE RATTRAP A THING OF BEAUTY
Writing Skills:	FORMAL & INFORMAL INVITATIONS, REPLY TO THE INVITATION

MONTH: NOVEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: 15 %
VISTAS:	SHOULD WIZARD HIT MOMMY? ON THE FACE OF IT
Writing Skills:	JOB APPLICATION

MONTH: DECEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: 15 %
FLAMINGO:	INDIGO AUNT JENNIFER'S TIGER
Writing Skills:	REPORT WRITING

MONTH: JANUARY 2022	PERCENTAGE OF SYLLABUS COVERED: 5 %
VISTAS:	EVANS TRIES AN 'O' LEVEL Assessment of Speaking and listening skills

MONTH: FEBRUARY 2022	PERCENTAGE OF SYLLABUS COVERED: 5%
Reading skills:	Unseen passages (discursive & Case based) Revision

DETAILED SYLLABUS MONTHWISE+
CLASS XII
Class XII (2021 – 2022)

TERM - I

One Paper 90 minutes

Max Marks: 40

No.	Units	Marks
I.	Relations and Functions	08
II.	Algebra	10
III.	Calculus	17
V.	Linear Programming	05
Total		40
Internal Assessment		10

BOOKS:

Mathematics by NCERT Vol 1 and Vol 2

Exemplar

(MARCH-MAY)

Relations and Functions (10%)

Types of relations: Reflexive, symmetric, transitive and equivalence relations. One to one and onto functions, composite functions, inverse of a function. Binary operations.

Inverse Trigonometric Functions (10%)

Definition, range, domain, principal value branches. Graphs of inverse trigonometric functions. Elementary properties of inverse trigonometric functions.

Matrices (10%)

Concept, notation, order, equality, types of matrices, zero matrix, transpose of a matrix, symmetric and skew symmetric matrices. Addition, multiplication and scalar multiplication of matrices, simple properties of addition, multiplication and scalar multiplication. Non-commutativity of multiplication of matrices and existence of non-zero matrices whose product is the zero matrix (restrict to square matrices of order 2). Concept of elementary row and column operations. Invertible matrices and proof of the uniqueness of inverse, if it exists; (Here all matrices will have real entries).

Determinant (15%)

Determinant of a square matrix (up to 3×3 matrices), properties of determinants, minors, cofactors and applications of determinants in finding the area of a triangle. Adjoint and inverse of a square matrix. Consistency, inconsistency and number of solutions of system of linear equations by examples, solving system of linear equations in two or three variables (having unique solution) using inverse of a matrix.

(JULY)

Continuity and Differentiability (18%)

Concepts of exponential, logarithmic functions. Derivatives of $\log_e x$ and e^x . Logarithmic differentiation. Derivative of functions expressed in parametric forms. Second order derivatives. Rolle's and Lagrange's Mean Value Theorems (without proof) and their geometric interpretations.

(AUGUST, SEPTEMBER)

Applications of Derivatives (23%)

Increasing/decreasing functions, tangents and normals, approximation, maxima and minima (first derivative test motivated geometrically and second derivative test given as a provable tool).

Simple problems (that illustrate basic principles and understanding of the subject as well as real-life situations).

Linear Programming (14%)

Introduction, related terminology such as constraints, objective function, optimization, different types of linear programming (L.P.) problems, mathematical formulation of L.P. problems, graphical method of solution for problems in two variables, feasible and infeasible regions, feasible and infeasible solutions, optimal feasible solutions (up to three non-trivial constraints)

INTERNAL ASSESSMENT 10 MARKS

Periodic Test 5 Marks

Mathematics Activities: Activity file record + Term end assessment of one activity & Viva
5 Marks

TERM - II

One Paper

Max Marks: 40		
No.	Units	Marks
III.	Calculus	18
IV.	Vectors and Three-Dimensional Geometry	14
VI.	Probability	8
Total		40
Internal Assessment		10

(OCTOBER)**Integrals (25%)**

Integration as inverse process of differentiation. Integration of a variety of functions by substitution, by partial fractions and by parts, only simple integrals of the type $-\int \frac{dx}{x^2+a^2}$, $\int \frac{dx}{\sqrt{x^2+a^2}}$, $\int \frac{dx}{\sqrt{a^2-x^2}}$, $\int \frac{dx}{ax^2+bx+c}$, $\int \frac{dx}{\sqrt{ax^2+bx+c}}$, $\int \frac{(px+q)dx}{\sqrt{ax^2+bx+c}}$, $\int \sqrt{a^2+x^2} dx$, $\int \sqrt{x^2-a^2} dx$, $\int \sqrt{ax^2+bx+c} dx$, $\int (px+q)\sqrt{ax^2+bx+c} dx$ to be evaluated.

Definite integrals as a limit of a sum. Fundamental Theorem of Calculus (without proof). Basic properties of definite integrals and evaluation of definite integrals.

Applications of the Integrals (10%)

Applications in finding the area under simple curves, especially lines, arcs of circles/parabolas/ellipses (in standard form only), area between the two above said curves (the region should be clearly identifiable).

Differential Equations (10%)

Definition, order and degree, general and particular solutions of a differential equation. Formation of differential equation whose general solution is given. Solution of differential equations by method of separation of variables, homogeneous differential equations of first order and first degree.

(NOVEMBER)

Solutions of linear differential equation of the type –

$$\frac{dy}{dx} + Py = Q, \text{ where P and Q are functions of x or constant.}$$

Vectors (10%)

Vectors and scalars, magnitude and direction of a vector. Direction cosines/ratios of vectors. Types

of vectors (equal, unit, zero, parallel and collinear vectors), position vector of a point, negative of a vector, components of a vector, addition of vectors, multiplication of a vector by a scalar, position vector of a point dividing a line segment in a given ratio. Scalar (dot) product of vectors, projection of a vector on a line. Vector (cross) product of vectors, scalar triple product.

(DECEMBER)

Three-dimensional Geometry (25%)

Direction cosines/ratios of a line joining two points. Cartesian and vector equation of a line, coplanar and skew lines, shortest distance between two lines. Cartesian and vector equation of a plane. Angle between (i) two lines, (ii) two planes, (iii) a line and a plane. Distance of a point from a plane.

Probability (20%)

Multiplications theorem on probability. Conditional probability, independent events, total probability, Baye's theorem.

(JANUARY)

Random variable and its probability distribution, mean and variance of haphazard variable.

INTERNAL ASSESSMENT 10 MARKS

Periodic Test 5 Marks

Mathematics Activities: Activity file record +Term end assessment of one activity & Viva
5 Marks

SYLLABUS 2021 - 2022	
CLASS	XII
NAME OF THE SUBJECT	Applied Mathematics
TEXT BOOKS	CBSE MATERIAL
REFERENCE BOOKS	ML AGARWAL

SYLLABUS:TERM 1

S. NO.	UNIT / CHAPTER	DISTRIBUTION OF MARKS
1.	Numbers, Quantification and Numerical Applications	06
2.	Algebra	10
3.	Calculus	15
4.	Probability Distribution	10
5.	Index Numbers and Time-based Series	
	Total	40
	Internal Assessment	10

MONTH: AUGUST 2021	PERCENTAGE OF SYLLABUS COVERED: 90%
<p>Unit III: Calculus(CONT.)</p> <ul style="list-style-type: none"> • Marginal cost and marginal revenue using derivatives <p>Unit IV: Probability Distribution</p> <ul style="list-style-type: none"> • Probability Distribution • Mathematical Expectation • Variance • Binomial Distribution • Poisson distribution • Normal distribution <p>Unit VI : Index numbers and Time-based Series</p> <ul style="list-style-type: none"> • Index numbers, uses of index numbers • Construction of index numbers (simple and weighted) 	

MONTH: SEPTEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: 100 %
<p>Unit VI : Index numbers and Time-based Series(cont.)</p> <ul style="list-style-type: none"> • Tests of adequacy of index numbers (unit test and time reversal test) 	

SYLLABUS:TERM 2

S. NO.	UNIT / CHAPTER	DISTRIBUTION OF MARKS
1.	Calculus(CONT.)	09
2.	Inferential Statistics	05
3.	Index Numbers and Time-based Series(CONT.)	05
4.	Financial Mathematics	15
5.	Linear Programming	06
	Total	40
	Internal Assessment	10

MONTH: OCTOBER 2021	PERCENTAGE OF SYLLABUS COVERED: 20%
Unit III: Calculus(CONT.) <ul style="list-style-type: none"> • Integration • Indefinite integral as family of curves • Definite integral as area under the curve • Integration of simple algebraic functions (primitive, by substitution, by parts) • Application of Integration (consumer surplus-producer surplus) • Differential equation (definition, order, degree) • Formulating and solving linear differential equation • Application of differential equation (Growth and Decay Model)s. 	

MONTH: NOVEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: 60 %
Unit V Inferential Statistics <ul style="list-style-type: none"> • Population and sample • Parameter, statistic and statistical inferences • t-Test (one sample t-test and two independent groups t-test) 	
Unit VI : Index numbers and Time-based Series(cont.) <ul style="list-style-type: none"> • Time Series • Component of Time Series • Time series analysis for univariate data sets • Trend analysis by moving average method • Trend analysis by fitting of linear trend line using least squares 	

MONTH: DECEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: 80%
Unit VIII Linear Programming	

- Introduction and related terminologies (constraints, objective function, optimization)
- Mathematical formulation of linear programming problems
- Different types of linear programming problems (Transportation and assignment problem)
- Graphical method of solution for problems in two variables
- Feasible and infeasible regions (bounded and unbounded)
- Feasible and infeasible solutions, optimal feasible solutions (up to three nontrivial constraints)

MONTH: JANUARY 2022

PERCENTAGE OF SYLLABUS COVERED: 100%

Unit VII Financial Mathematics

- Perpetuity, Sinking funds
- Valuation of Bonds (Present value approach and Relative price approach)
- Calculation of EMI
- Calculation of returns, nominal rate of return, effective rate of interest
- Compound annual growth rate
- Linear method of depreciation

MONTH: FEBRUARY 2022

PERCENTAGE OF SYLLABUS COVERED:

REVISION

SYLLABUS 2021 - 2022	
CLASS	XII
NAME OF THE SUBJECT	PHYSICS
TEXT BOOKS	NCERT
REFERENCE BOOKS	S L ARORA-NEW SIMPLIFIED PHYSICS

SYLLABUS: TERM 1

S. NO	UNIT / CHAPTER	DISTRIBUTION OF MARKS
1	Electrostatics <hr/> Chapter–1: Electric Charges and Fields <hr/> Chapter–2: Electrostatic Potential and Capacitance	9
2.	Current Electricity <hr/> Chapter–3: Current Electricity	8
3.	Magnetic Effects of Current and Magnetism <hr/> Chapter–4: Moving Charges and Magnetism <hr/> Chapter–5: Magnetism and Matter	9
4.	Electromagnetic Induction and Alternating Currents <hr/> Chapter–6: Electromagnetic Induction <hr/> Chapter 7: Alternating currents	9
	TOTAL	35

APRIL –MAY-JUNE-JULY-50% COMPLETED

MONTH: AUGUST 2021	PERCENTAGE OF SYLLABUS COVERED: <u>30</u> % OF TERM 1
<p>Unit III: Magnetic Effects of Current and Magnetism Chapter–4: Moving Charges and Magnetism Concept of magnetic field, Oersted's experiment. Biot - Savart law and its application to current carrying circular loop. Ampere's law and its applications to infinitely long straight wire. Straight and toroidal solenoids (only qualitative treatment), force on a moving charge in uniform magnetic and electric fields. Force on a current-carrying conductor in a uniform magnetic field, force between two</p>	

parallel current-carrying conductors-definition of ampere, torque experienced by a current loop in uniform magnetic field; moving coil galvanometer-its current sensitivity and conversion to ammeter and voltmeter.

Chapter-5: Magnetism and Matter

Current loop as a magnetic dipole and its magnetic dipole moment, magnetic dipole moment of a revolving electron, bar magnet as an equivalent solenoid, magnetic field lines; earth's magnetic field and magnetic elements.

MONTH: SEPTEMBER 2021

**PERCENTAGE OF SYLLABUS COVERED: 20
% OF TERM 1**

Unit IV: Electromagnetic Induction and Alternating Currents

Electromagnetic induction; Faraday’s law, induced emf and current; Lenz’s Law, Eddy currents. Self and mutual inductance, displacement current.

Alternating currents, peak and rms value of alternating current/voltage; reactance and impedance; LC oscillations (qualitative treatment only), LCR series circuit, resonance; power in AC circuits, wattless current.

AC generator and transformer.

PRACTICALS FOR TERM 1

Time Allowed: one and half hours

Max. Marks: 15

Two experiments to be performed by students at time of examination	8 marks
Practical record [experiments and activities]	2 marks
Viva on experiments, and activities	5 marks
Total	15 marks

Experiments assigned for Term I

- To determine resistivity of two / three wires by plotting a graph between potential difference versus current.
- To find resistance of a given wire / standard resistor using metre bridge.

OR

To verify the laws of combination (series) of resistances using a metre bridge.

OR

To verify the laws of combination (parallel) of resistances using a metre bridge.

- To compare the EMF of two given primary cells using potentiometer.

OR

To determine the internal resistance of given primary cell using potentiometer.

- To determine resistance of a galvanometer by half-deflection method and to find its figure of merit.
- To convert the given galvanometer (of known resistance and figure of merit) into a voltmeter of desired range and to verify the same.

OR

To convert the given galvanometer (of known resistance and figure of merit) into an ammeter of desired range and to verify the same.

- To find the frequency of AC mains with a sonometer.

Activities assigned for Term I

1. To measure the resistance and impedance of an inductor with or without iron core.
2. To measure resistance, voltage (AC/DC), current (AC) and check continuity of a given circuit using multimeter.
3. To assemble a household circuit comprising three bulbs, three (on/off) switches, a fuse and a power source.
4. To assemble the components of a given electrical circuit.
5. To study the variation in potential drop with length of a wire for a steady current.
6. To draw the diagram of a given open circuit comprising at least a battery, resistor/rheostat, key, ammeter and voltmeter. Mark the components that are not connected in proper order and correct the circuit and also the circuit diagram.

TERM 2

S. NO.	UNIT / CHAPTER	DISTRIBUTION OF MARKS
1	Electromagnetic Waves	17
	Chapter–8: Electromagnetic Waves	
	Optics	
	Chapter–9: Ray Optics and Optical Instruments Chapter–10: Wave Optics	
2.	Dual Nature of Radiation and Matter	11
	Chapter–11: Dual Nature of Radiation and Matter	
	Atoms and Nuclei	
	Chapter–12: Atoms Chapter–13: Nuclei	
3.	Electronic Devices	7
	Chapter–14: Semiconductor -Electronics: Materials, Devices and Simple Circuits	

MONTH: OCTOBER 2021	PERCENTAGE OF SYLLABUS COVERED: 50 _____ % of term 2
<p>Unit V: Electromagnetic waves Displacement current, Electromagnetic waves and their characteristics (qualitative ideas only). Transverse nature of electromagnetic waves. Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, X-rays, gamma rays) including elementary facts about their uses</p> <p>Unit VI: Optics Wave optics: wave front and Huygens’ principle, reflection and refraction of plane wave at a plane surface using wave fronts. Proof of laws of reflection and refraction using Huygens’ principle. Interference, coherent sources,</p>	

Young's double slit experiment and expression for fringe width. Diffraction due to a single slit, width of central maximum.

Optical instruments: Microscopes, astronomical telescopes (reflecting and refracting). Magnifying powers and resolving power of microscopes and astronomical telescopes.

RAY OPTICS

Ray Optics: Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and its applications, optical fibres, refraction at spherical surfaces, lenses, thin lens formula, lensmaker's formula, magnification, power of a lens, combination of thin lenses in contact, refraction and dispersion of light through a prism. Scattering of light - blue colour of sky and reddish appearance of the sun at sunrise and sunset. Optical Instruments.

MONTH: NOVEMBER 2021

**PERCENTAGE OF SYLLABUS COVERED: __20__
% of term 2**

Unit VII: Dual Nature of Matter and Radiation

Dual nature of radiation, Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation-particle nature of light. Experimental study of photoelectric effect Matter waves-wave nature of particles, de-Broglie relation

MONTH: DECEMBER 2021

**PERCENTAGE OF SYLLABUS COVERED: __20__
% of term 2**

Unit VIII: Atoms & Nuclei

Chapter-12: Atoms

Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model, energy levels, hydrogen spectrum.

Chapter-13: Nuclei Composition and size of nucleus Nuclear force Mass-energy relation, mass defect, nuclear fission, nuclear fusion.

MONTH: JANUARY 2022

**PERCENTAGE OF SYLLABUS COVERED: __10__
% of term 2**

Unit IX: Electronic Devices

Semiconductors; semiconductor diode – I-V characteristics in forward and reverse bias, diode

as a rectifier; LED, photodiode, solar cell.

PRACTICALS TERM 2

Evaluation Scheme

Time Allowed: one and half hours

Max. Marks: 15

Two experiments to be performed by students at time of examination	8 marks
Practical record [experiments and activities]	2 marks
Viva on experiments, and activities	5 marks
Total	15 marks

Experiments assigned for Term-II

1. To find the focal length of a convex lens by plotting graphs between u and v or between $1/u$ and $1/v$.
2. To find the focal length of a convex mirror, using a convex lens.
OR
To find the focal length of a concave lens, using a convex lens.
3. To determine angle of minimum deviation for a given prism by plotting a graph between angle of incidence and angle of deviation.
4. To determine refractive index of a glass slab using a travelling microscope.
5. To find refractive index of a liquid by using convex lens and plane mirror.
6. To draw the I-V characteristic curve for a p-n junction diode in forward bias and reverse bias.

Activities assigned for Term-II

1. To identify a diode, an LED, a resistor and a capacitor from a mixed collection of such items.
2. Use of multimeter to see the unidirectional flow of current in case of a diode and an LED and check whether a given electronic component (e.g., diode) is in working order.
3. To study effect of intensity of light (by varying distance of the source) on an LDR.
4. To observe refraction and lateral deviation of a beam of light incident obliquely on a glass slab.
5. To observe polarization of light using two Polaroids.
6. To observe diffraction of light due to a thin slit.
7. To study the nature and size of the image formed by a (i) convex lens, (ii) concave mirror, on a screen by using a candle and a screen (for different distances of the candle from the lens/mirror).
8. To obtain a lens combination with the specified focal length by using two lenses from the given set of lenses.

SYLLABUS 2021 - 2022	
CLASS	XII
NAME OF THE SUBJECT	Chemistry
TEXT BOOKS	Chemistry Part -I, Class-XI, Published by NCERT. Chemistry Part -II, Class-XI, Published by NCERT. Chemistry Lab Manual, Class XI, Published by NCERT
REFERENCE BOOKS	

SYLLABUS:

SYLLABUS FOR SESSION 2021-22 CLASS XII Term-I

S.No	UNIT	Periods	MARKS
1	Solid State	8	10
2	Solutions	8	
3	p-Block Elements	7	10
4	Haloalkanes and Haloarenes	9	15
5	Alcohols, Phenols and Ethers	9	
6	Biomolecules	8	
	TOTAL	49	35

MONTH: AUGUST	PERCENTAGE OF SYLLABUS COVERED: <u>10</u> %
<p>p Block Elements: Group -15 Elements: General introduction, electronic configuration, occurrence, oxidation states, trends in physical and chemical properties; Nitrogen preparation properties and uses; compounds of Nitrogen: preparation and properties of Ammonia and Nitric Acid. Group 16 Elements: General introduction, electronic configuration, oxidation states, occurrence, trends in physical and chemical properties, dioxygen: preparation, properties and uses, classification of Oxides, Ozone, Sulphur -allotropic forms; compounds of Sulphur: preparation properties and uses of Sulphur-dioxide, Sulphuric Acid: properties and uses; Oxoacids of Sulphur (Structures only). Group 17 Elements: General introduction, electronic configuration, oxidation states, occurrence, trends in physical and chemical properties; compounds of halogens, Preparation, properties and uses of Chlorine and Hydrochloric acid, interhalogen compounds, Oxoacids of halogens (structures only). Group 18 Elements: General introduction, electronic configuration, occurrence, trends in physical and chemical properties, uses.</p> <p>Biomolecules: Carbohydrates - Classification (aldoses and ketoses), monosaccharides (glucose and fructose), D-L configuration</p>	

Note: Chapter 10 , 11, 1 and 2 already completed

MONTH: SEPTEMBER	PERCENTAGE OF SYLLABUS COVERED: 6
Biomolecules:	

Proteins -Elementary idea of - amino acids, peptide bond, polypeptides, proteins, structure of proteins - primary, secondary, tertiary structure and quaternary structures (qualitative idea only), denaturation of proteins
Nucleic Acids: DNA and RNA

Revision

Term-I Evaluation Scheme

S. No	Practical	Marks
1.	Volumetric Analysis	4
2.	Salt Analysis	4
3.	Content Based experiment	2
4.	Class record and viva (Internal Examiner)	5
	TOTAL	15

(1) Volumetric analysis (4 marks)

Determination of concentration/ molarity of KMnO_4 solution by titrating it against a standard solution of:

- Oxalic acid,
- Ferrous Ammonium Sulphate

(Students will be required to prepare standard solutions by weighing themselves).

(2) Salt analysis (Qualitative analysis) (4 marks)

Determination of one cation and one anion in a given salt.

Cations- Pb^{2+} , Cu^{2+} , As^{3+} , Al^{3+} , Fe^{3+} , Mn^{2+} , Ni^{2+} , Zn^{2+} , Co^{2+} , Ca^{2+} , Sr^{2+} , Ba^{2+} , Mg^{2+} , NH_4^+

Anions – $(\text{CO}_3)^{2-}$, S^{2-} , NO_2^- , SO_3^{2-} , SO_4^{2-} , NO_3^- , Cl^- , Br^- , I^- , PO_4^{3-} , $\text{C}_2\text{O}_4^{2-}$, CH_3COO^- (Note: Insoluble salts excluded)

(3) Content Based Experiments (2 marks)

A. Chromatography

i. Separation of pigments from extracts of leaves and flowers by paper chromatography and determination of R_f values.

ii. Separation of constituents present in an inorganic mixture containing two cations only (constituents having large difference in R_f values to be provided).

B. Characteristic tests of carbohydrates, fats and proteins in pure samples and their detection in given foodstuffs.

SYLLABUS FOR SESSION 2021-22 CLASS XII Term-II

S.No	UNIT	No. of Periods	MARKS
1	Electrochemistry	7	13
2	Chemical Kinetics	5	
3	Surface Chemistry	5	
4	d-and f-Block Elements	7	9
5	Coordination Compounds	8	
6	Aldehydes, Ketones and Carboxylic Acids	10	13
7	Amines	7	
	TOTAL	49	35

MONTH: OCTOBER	PERCENTAGE OF SYLLABUS COVERED: 16 %
<p>Electrochemistry: Redox reactions, EMF of a cell, standard electrode potential, Nernst equation and its application to chemical cells, Relation between Gibbs energy change and EMF of a cell, conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law, electrolysis.</p> <p>Chemical Kinetics: Rate of a reaction (Average and instantaneous), factors affecting rate of reaction: concentration, temperature, catalyst; order and molecularity of a reaction, rate law and specific rate constant, integrated rate equations and half-life (only for zero and first order reactions)</p>	

MONTH: NOVEMBER	PERCENTAGE OF SYLLABUS COVERED: 16 %
<p>Surface Chemistry: Adsorption - physisorption and chemisorption, factors affecting adsorption of gases on solids, colloidal state: distinction between true solutions, colloids and suspension; lyophilic, lyophobic, multi-molecular and macromolecular colloids; properties of colloids; Tyndall effect, Brownian movement, electrophoresis, coagulation.</p> <p>d-and f-Block Elements: General introduction, electronic configuration, occurrence and characteristics of transition metals, general trends in properties of the first row transition metals – metallic character, ionization enthalpy, oxidation states, ionic radii, colour, catalytic property, magnetic properties, interstitial compounds, alloy formation. Lanthanoids - Electronic configuration, oxidation states and lanthanoid contraction and its consequences.</p>	

MONTH: DECEMBER	PERCENTAGE OF SYLLABUS COVERED: <u> 8 </u> %
<p>Coordination Compounds: Coordination compounds - Introduction, ligands, coordination number,</p>	

colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds. Bonding, Werner's theory, VBT, and CFT.

MONTH: JANUARY

PERCENTAGE OF SYLLABUS COVERED: 13 %

Revision

Note: Chapter 12 and 13 already completed

TERM-II Evaluation Scheme

S. No	Practical	Marks
1.	Volumetric Analysis	4
2.	Salt Analysis	4
3	Content Based Experiment	2
4	Project Work and Viva (Internal and External Both)	5
	TOTAL	15

1) Volumetric analysis (4 marks)

Determination of concentration/ molarity of KMnO_4 solution by titrating it against a standard solution of:

- Oxalic acid,
- Ferrous Ammonium Sulphate

(Students will be required to prepare standard solutions by weighing themselves).

2) Salt analysis (Qualitative analysis) (4 marks)

Determination of one cation and one anion in a given salt.

Cations- Pb^{2+} , Cu^{2+} , As^{3+} , Al^{3+} , Fe^{3+} , Mn^{2+} , Ni^{2+} , Zn^{2+} , Co^{2+} , Ca^{2+} , Sr^{2+} , Ba^{2+} , Mg^{2+} , NH_4^+

Anions – $(\text{CO}_3)^{2-}$, S^{2-} , NO_2^- , SO_3^{2-} , SO_4^{2-} , NO_3^- , Cl^- , Br^- , I^- , PO_4^{3-} , $\text{C}_2\text{O}_4^{2-}$, CH_3COO^- (Note: Insoluble salts excluded)

3) Content based experiment

A. Preparation of Inorganic Compounds

Preparation of double salt of Ferrous Ammonium Sulphate or Potash Alum.

Preparation of Potassium Ferric Oxalate.

B. Tests for the functional groups present in organic compounds:

Unsaturation, alcoholic, phenolic, aldehydic, ketonic, carboxylic and amino (Primary) groups.

C. PROJECTS scientific investigations involving laboratory testing and collecting information from other sources

MONTHLY PLANNING OF SYLLABUS

BIOLOGY (CODE 044)

CLASS XII

SESSION: 2021-22

Recommended Textbooks.

1. Biology, Textbook for XII, Published by NCERT

Name of the Units and their weightage in CBSE 12 Biology Board Exam

Unit No.	TERM-I	Marks
Unit VI	Reproduction – Chapter-2, 3 and 4	15
Unit VII	Genetics and Evolution – Chapter-5 and 6	20
Unit No.	TERM-II	Marks
Unit VIII	Biology and Human Welfare – Chapter-8 and 10	14
Unit IX	Biotechnology and its Applications – Chapter-11 and 12	11
Unit X	Ecology and Environment – Chapter-13 and 15	10
	Total Theory (Term-I and Term-II)	70

TERM-I

AUGUST (UNIT VII – GENETICS and EVOLUTION) 8.3%

Ch-6-Molecular basis of Inheritance: Structure of DNA and RNA; DNA packaging; Search for genetic material and DNA as genetic material; DNA packaging; DNA replication; Central Dogma; Transcription, Genetic code, Translation; Gene expression and regulation- Lac operon; Genome, Human and Rice genome project; DNA finger printing.

SEPTEMBER (UNIT VII – GENETICS and EVOLUTION contd.)

Ch-6-Molecular basis of Inheritance: Revision and Practicals.

TERM-II

OCTOBER (UNIT VIII – BIOLOGY and HUMAN WELFARE) 16.7%

Ch-8-Human Health and Diseases: Pathogens; parasites causing human diseases (Malaria, Dengue, Chikengunia, Filariasis, Ascariasis, Typhoid, Pneumonia, common cold, amoebiasis, ring worm) and their control; Basic concepts of immunology- Vaccines; Cancer, HIV and AIDS; Adolescence- Drug and Alcohol Abuse.

Ch-10-Microbes in Human Welfare: Microbes in Food Processing, Industrial production, Antibiotics, production and judicious use, sewage treatment, energy generation and microbes as biocontrol agents and biofertilizers.

NOVEMBER (UNIT IX – BIOTECHNOLOGY and ITS APPLICATIONS) 16.7%

Ch-11-Biotechnology- Principles and Processes: Genetic engineering (Recombinant DNA technology).

Ch-12-Biotechnology and its Applications: Application of Biotechnology in health and agriculture: RNA Interference, Human insulin and vaccine production; Stem cell technology, Gene Therapy; Molecular Diagnosis; Genetically modified organisms- Bt crops; Transgenic Animals; Biosafety issues, Bio Piracy and Patents.

DECEMBER (UNIT X - ECOLOGY AND ENVIRONMENT) 16.7%

Ch-13-Organisms and Populations: Organisms and Environment: Habitat and niche, Abiotic factors, Population and Ecological adaptations; Population interactions – mutualism, competition, predation, parasitism, commensalism; Population attribute - growth, birth rate and death rate, age distribution.

Ch-15-Biodiversity and Conservation: Biodiversity - Concept, Levels, Patterns, Importance; Loss of biodiversity; Biodiversity conservation; Hotspots, endangered organisms, Extinction, Red data book, Sacred groves, Biosphere reserves, National Parks and Wildlife Sanctuaries and Ramsar sites.

JANUARY (TERM-II Syllabus): Revision of Term-II Syllabus and Practicals

PRACTICALS: Evaluation Scheme and List of Experiments

Max. Marks: 15 for each term

Evaluation Scheme			
	TERM-I	TERM-II	MARKS
PART-A			
One Major experiment	Experiment-1	Experiment-3	4
One Minor experiment	Experiment-2	Experiment-4,5	3
PART-B			
Spotting (3 spots of 1 mark each)	B-1,2,3,4,5	B-6,7,8	3
Practical Record + Investigatory Project + Viva Voice			5
Total			15

A. List of Experiments:

TERM-I

1. Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc.
2. Study pollen germination on a slide.

TERM-II

3. Prepare a temporary mount of onion root tip to study mitosis.
4. Collect water from two different water bodies around you and study them for pH, clarity and presence of any living organism.
5. Collect and study soil from atleast two different sites and study them for texture, moisture content, pH and water holding capacity. Co-relate with the kinds of plants found in them.

B. Study/Observation of the following (Spotting):

TERM-I

1. Flowers adapted to pollination by different agencies (wind, insects, birds).
2. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper mice).
3. Meiosis in onion bud cell or grasshopper testis through permanent slides.
4. T.S. of blastula through permanent slides (Mammalian).
5. Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness.

TERM-II

6. Common disease causing organisms Like Ascaris, Entamoeba, Plasmodium, Roundworm through permanent slides or specimens. Comment on symptoms of diseases that they cause.
7. Two plants and two animals (models/virtual images) found in xeric conditions. Comment upon their morphological adaptations.
8. Two plants and two animals (models/virtual images) found in aquatic conditions. Comment upon their morphological adaptations.

SYLLABUS 2021 - 2022	
CLASS	XII
NAME OF THE SUBJECT	Computer Science
TEXT BOOKS	Computer science, NCERT class XII
REFERENCE BOOKS	“Computer science”, by Preeti Arora (Sultan Chand Publication), class XII

SYLLABUS:

S. N	UNIT / CHAPTER	DISTRIBUTION OF MARKS
1	Unit 1: Computational Thinking and Programming - 2	40
2	Unit 2: Computer Networks	10
3	Unit 3: Database Management	20

Term-I

MONTH: AUGUST 2021	PERCENTAGE OF SYLLABUS COVERED: 5 %
, Binary file: basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump () and load() method, read, write/create, search, append and update operations in a binary file	

MONTH: SEPTEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: 5 %
CSV file: import csv module, open / close csv file, write into a csv file using csv.writerow() and read from a csv file using csv.reader()	

Term-II

MONTH: OCTOBER 2021	PERCENTAGE OF SYLLABUS COVERED: 20 %
<p>Unit 1: Data Structure: Stack, operations on stack (push & pop), implementation of stack using list.</p> <p>Unit 2: Evolution of networking: introduction to computer networks, evolution of networking (ARPANET NSFNET, INTERNET)</p> <ul style="list-style-type: none"> ● Data communication terminologies: concept of communication, components of data communication (sender, receiver, message, communication media, protocols), measuring capacity of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuit switching, Packet switching) ● Transmission media: Wired communication media (Twisted pair cable, Co-axial cable, Fiber-optic cable), Wireless media (Radio waves, Microwaves, Infrared waves) ● Network devices (Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card) ● Network topologies and Network types: types of networks (PAN, LAN, MAN, WAN), networking topologies (Bus, Star, Tree) ● Network protocol: HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP ● Introduction to web services: WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML), domain names, URL, website, web browser, web servers, web hosting 	

MONTH: NOVEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: 15 %
Unit 3: Database concepts: introduction to database concepts and its need, Relational data model: relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key), Structured Query Language: introduction, Data Definition Language and Data Manipulation Language, data type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key), create database, use database, show databases, drop database	

MONTH: DECEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: 15%
Unit 3: show tables, create table, describe table, alter table (add and remove an attribute, add and remove primary key), drop table, insert, delete, select, operators (mathematical, relational and logical), aliasing, distinct clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command, Aggregate functions (max, min, avg, sum, count), group by, having clause, joins: Cartesian product on two tables, equi-join and natural join. Interface of python with an SQL database: connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using fetchone(), fetchall(), rowcount, creating database connectivity applications	

MONTH: JANUARY 2022	PERCENTAGE OF SYLLABUS COVERED: _____ %
Revision	

MONTH: FEBRUARY 2022	PERCENTAGE OF SYLLABUS COVERED: _____ %
Revision	

SYLLABUS 2021 - 2022	
CLASS	XII
NAME OF THE SUBJECT	Informatics practices
TEXT BOOKS	Informatics Practices, NCERT class XII
REFERENCE BOOKS	“Informatics Practices”, by Preeti Arora (Sultan Chand Publication), class XII

SYLLABUS:

S. N	UNIT / CHAPTER	DISTRIBUTION OF MARKS
1	Data Handling using Pandas and Data Visualization	25
2	Database Query using SQL	25
3	Introduction to Computer Networks	10
4	Societal Impacts	10

Term-I

MONTH: AUGUST 2021	PERCENTAGE OF SYLLABUS COVERED: 5%
Unit 4: Digital footprint, net and communication etiquettes, <ul style="list-style-type: none"> • Data protection, intellectual property rights (IPR), plagiarism, licensing and copyright, • Free and open-source software (FOSS), 	
MONTH: SEPTEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: 5 %
<ul style="list-style-type: none"> • Cybercrime and cyber laws, hacking, phishing, cyber bullying, overview of Indian IT Act. • E-waste: hazards and management. Awareness about health concerns related to the usage of technology 	

Term-II

MONTH: OCTOBER 2021	PERCENTAGE OF SYLLABUS COVERED: 20 %
Unit 2: Database Query using SQL <ul style="list-style-type: none"> • Math functions: POWER (), ROUND (), MOD (). • Text functions: UCASE ()/UPPER (), LCASE ()/LOWER (), MID ()/SUBSTRING ()/SUBSTR (), LENGTH (), LEFT (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM (). Date Functions: NOW (), DATE (), MONTH (), MONTHNAME (), YEAR (), DAY (), 	
MONTH: NOVEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: 20 %
Unit 2: Database Query using SQL DAYNAME (). Aggregate Functions: MAX (), MIN (), AVG (), SUM (), COUNT (); using COUNT (*). <ul style="list-style-type: none"> • Querying and manipulating data using Group by, Having, Order by 	

MONTH: DECEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: 10 %
Unit 3: Introduction to Computer Networks • Introduction to networks, Types of network: LAN, MAN, WAN. • Network Devices: modem, hub, switch, repeater, router, gateway. • Network Topologies: Star, Bus, Tree, Mesh. • Introduction to Internet, URL, WWW and its applications- Web, email, Chat, VoIP. • Website: Introduction, difference between a website and webpage, static vs dynamic web page, web server and hosting of a website. • Web Browsers: Introduction, commonly used browsers, browser settings, add-ons and plug-ins, cookies.	

MONTH: JANUARY 2022	PERCENTAGE OF SYLLABUS COVERED: _____ %
Revision	

MONTH: FEBRUARY 2022	PERCENTAGE OF SYLLABUS COVERED: _____ %
Revision	

SYLLABUS 2021 - 2022	
CLASS	XII
NAME OF THE SUBJECT	ECONOMICS
TEXT BOOKS	Indian Economic Development, NCERT Macroeconomics, NCERT Indian Economic Development (Sandeep Garg) Macroeconomics (Sandeep Garg)
REFERENCE BOOKS	Indian Economic Development (V.K.Ohri) Macroeconomics (V.K.Ohri)

TERM 1 - MCQ BASED QUESTION PAPER Theory: 40 Marks	Marks	Periods
Time: 90 minutes		
Part A: Introductory Macroeconomics		
▪ Money and Banking	6	8
▪ Government Budget and the Economy	6	15
▪ Balance of Payments	6	7
Sub Total	18	30
Part B: Indian Economic Development		
▪ Development Experience (1947-90) and Economic Reforms since 1991: <ul style="list-style-type: none"> ● Indian Economy on the eve of Independence ● Indian Economy (1950-90) ● Liberalisation, Privatisation and Globalisation : An Appraisal 	12	28
▪ Current challenges facing Indian Economy <ul style="list-style-type: none"> ● Poverty ● Human Capital Formation ● Rural development 	10	17
Sub Total	22	45
Total	40	75
Project Work (Part 1): 10 Marks		

MONTH: AUGUST 2021	PERCENTAGE OF SYLLABUS COVERED: 18%
<p>Unit 6: Development Experience (1947-90) and Economic Reforms since 1991:</p> <p>A brief introduction of the state of Indian economy on the eve of independence. Common goals of Five-Year Plans. Main features, problems and policies of agriculture (institutional aspects and new agricultural strategy, etc.), industry (industrial licensing, etc.) and foreign trade.</p> <p>Economic Reforms since 1991: Features and appraisals of Liberalization, Globalization and Privatization (LPG policy); Concepts of Demonetization and GST</p> <p>Unit 7: Current challenges facing Indian Economy</p> <p>Poverty- absolute and relative; Main programs for poverty alleviation: A critical assessment.</p> <p>Rural development: Key issues - credit and marketing - role of cooperatives; diversification; alternative farming - organic farming</p> <p>PROJECT WORK</p>	

MONTH: SEPTEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: 6%
<p>Human Capital Formation : How people become resource ; Role of human capital in economic development ; Growth of Education Sector in India</p> <p>TERM 1 REVISION</p>	

TERM 2 - SUBJECTIVE QUESTION PAPER Theory: 40 Marks	Marks	Periods
Part A: Introductory Macroeconomics		
▪ National Income and Related Aggregates	10	23
▪ Determination of Income and Employment	12	22
Sub Total	22	45
Part B: Indian Economic Development		
▪ Current challenges facing Indian Economy <ul style="list-style-type: none"> ● Employment ● Infrastructure ● Sustainable Economic Development 	12	18
▪ Development Experience of India – A Comparison with Neighbours- <ul style="list-style-type: none"> ● Comparative Development Experience of India and its Neighbours 	06	12
Sub Total	18	30
Total	40	75
Project Work: 10 Marks		

TERM 2

MONTH: OCTOBER 2021	PERCENTAGE OF SYLLABUS COVERED: 10%
<p>Unit 7: Current challenges facing Indian Economy</p> <p>Employment : Formal and informal growth ; problems and policies.</p> <p>Infrastructure : Meaning and Types : Case Studies : Health : Problems and Policies- A critical assessment ;</p>	

MONTH: NOVEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: 20 %
<p>Unit 7: Current challenges facing Indian Economy</p> <p>Sustainable Economic Development: Meaning, Effects of Economic Development on Resources and Environment, including global warming.</p> <p>Unit 8: Development Experience of India : A comparison with neighbors India and Pakistan India and China Issues: growth, population, sectoral development and other Human Development Indicators.</p> <p>PROJECT WORK</p>	

MONTH: DECEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: <u> 20 </u> %
Unit 1: National Income and Related Aggregates Revision Unit 3: Determination of Income and Employment Revision	

MONTH: JANUARY 2022	PERCENTAGE OF SYLLABUS COVERED: <u> </u> %
REVISION	

MONTH: FEBRUARY 2022	PERCENTAGE OF SYLLABUS COVERED: <u> </u> %
PRACTICALS	

SYLLABUS 2021 - 2022	
CLASS	XII
NAME OF THE SUBJECT	ACCOUNTANCY
TEXT BOOKS	Accountancy for class XII- NCERT PART1 and 2
REFERENCE BOOKS	<ol style="list-style-type: none"> 1. Accounting for partnership firms – D. K. Goel 2. Accounting for company accounts – D.K. Goel 3. Analysis of financial statements - D.K. Goel

SYLLABUS:

S. NO.	UNIT / CHAPTER	DISTRIBUTION OF MARKS
	TERM I ACCOUNTING FOR PARTNERSHIP FIRMS: 1 FUNDAMENTALS 2 CHANGE IN PROFIT SHARING RATIO 3 ADMISSION OF A PARTNER	18
	COMPANY ACCOUNTS: 12 1 ACCOUNTING FOR SHARES	12
	PART B ANALYSIS OF FINANCIAL STATEMENTS: FINANCIAL STATEMENTS OF A COMPANY (i) Statement of Profit and Loss and Balance Sheet in prescribed form with major headings and sub headings (as per Schedule III to the Companies Act, 2013) (ii) Tools of Analysis - Ratio Analysis (iii) ACCOUNTING RATIOS	10
	PROJECT WORK	10
		50
	TERM II	
	ACCOUNTING FOR NOT-FOR PROFIT ORGANISATIONS	10
	ACCOUNTING FOR PARTNERSHIP FIRMS: 1 RETIREMENT AND DEATH OF A PARTNER 2 DISSOLUTION OF PARTNERSHIP FIRM	12
	COMPANY ACCOUNTS: ACCOUNTING FOR DEBENTURES	8
	ANALYSIS OF FINANCIAL STATEMENTS: 1 FINANCIAL STATEMENTS OF A COMPANY (i) COMPARATIVE AND COMMON SIZE STATEMENTS 2 CASH FLOW STATEMENT	10
	PROJECT WORK	10
		50

MONTH: AUGUST 2021

PERCENTAGE OF SYLLABUS COVERED: 16 %

Accounting for Share Capital

- Share and share capital:** nature and types.
- Accounting for share capital: issue and allotment of equity and preferences shares.
- Public subscription of shares – over subscription and under subscription of shares; issue at par and at premium, calls in advance and arrears (excluding interest), issue of shares for consideration other than cash.
- Concept of Private Placement and Employee Stock Option Plan (ESOP)
- Accounting treatment of forfeiture and re-issue of shares.
- Disclosure of share capital in company's Balance Sheet.

Analysis of Financial Statements

Analysis of Financial Statements

Financial statements of a company: Statement of Profit and Loss and Balance Sheet in the prescribed form with major headings and subheadings (as per Schedule III to the Companies Act, 2013).

Financial Statement Analysis: Objectives, importance and limitations.

Tools for Financial Statement Analysis: Comparative statements, common size statements, cash flow analysis, and ratio analysis.

Accounting Ratios: Meaning, Objectives, classification and computation.

Liquidity Ratios: Current ratio and Quick ratio.

Solvency Ratios: Debt to Equity Ratio, Total Asset to Debt Ratio, Proprietary Ratio and Interest Coverage Ratio.

MONTH: SEPTEMBER 2021

PERCENTAGE OF SYLLABUS COVERED: 17 %

Analysis of Financial Statements

Activity Ratios: Stock Turnover Ratio, Debtors Turnover Ratio, Creditors Turnover Ratio and Working Capital Turnover Ratio.

Profitability Ratios: Gross Profit Ratio, Operating Ratio, Operating Profit Ratio, Net Profit Ratio and Return on Investment.

Project work

Accounting for Debentures

Debentures: Issue of debentures at par, at a premium and at a discount. Issue of debentures for consideration other than cash; Issue of debentures with terms of redemption.

MONTH: OCTOBER 2021

PERCENTAGE OF SYLLABUS COVERED: 3 %

Revision work

debentures as collateral security concept, interest on debentures. Writing off discount / loss on issue of debentures

MONTH: NOVEMBER 2021

PERCENTAGE OF SYLLABUS COVERED: 7 %

REVISION WORK

Comparative statements and common size statements

Cash Flow Statement

Meaning, objectives and preparation (as per AS 3 (Revised) (Indirect Method only)

MONTH: DECEMBER 2021

PERCENTAGE OF SYLLABUS COVERED: _14 %

Cash Flow Statement

Meaning, objectives and preparation (as per AS 3 (Revised) (Indirect Method only)

Project work

Dissolution of partnership firms

Meaning of dissolution of partnership and partnership firm.

Types of dissolution of firm. Settlement of accounts - preparation of realization account, and other related accounts (excluding piecemeal distribution, sale to a company and insolvency of partner(s)).

MONTH: JANUARY 2022

PERCENTAGE OF SYLLABUS COVERED: __4%

Remaining part of Dissolution of partnership firms

MONTH: FEBRUARY 2022

PERCENTAGE OF SYLLABUS COVERED: _____ %

Revision work

SYLLABUS 2021 – 2022	
CLASS	XII
NAME OF THE SUBJECT	BUSINESS STUDIES
TEXT BOOKS	BUSINESS STUDIES (PART 1 AND 2)- NCERT
REFERENCE BOOKS	BUSINESS STUDIES (PART 1 AND 2) – SANDEEP GARG

SYLLABUS:

Units	TERM 1- MCQ BASED QUESTION PAPER THEORY - 40 MARKS DURATION: 90 MINUTES	DISTRIBUTION OF MARKS
Part A	Principles and Functions of Management	
1.	Nature and Significance of Management	16
2	Principles of Management	
3	Business Environment	
4	Planning	14
5	Organising	
	Total	30
Part B	Business Finance and Marketing	
11	Marketing Management	10
	PROJECT WORK (PART 1)	10
	Total	50
Units	TERM-2 SUBJECTIVE QUESTION PAPER Theory- 40 Marks DURATION:-2 Hrs	
Part A	Principles and Functions of Management	
6	Staffing	20
7	Directing	
8	Controlling	
	Total	20
Part B	Business Finance and Marketing	
9	Financial Management	15
10	Financial Markets	
12	Consumer Protection	5
	Total	20
	Total	40
	PROJECT WORK (PART – 2)	10

MONTH: AUGUST 2021	PERCENTAGE OF SYLLABUS COVERED:18 %
UNIT 11 MARKETING Marketing – Concept, functions and philosophies -Product, Price and Standard Marketing Mix – Concept and elements Product - branding, labelling and packaging –Concept Price - Concept, Factors determining price Physical Distribution – concept PROJECT WORK	

MONTH: SEPTEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: 2 %
UNIT 11 MARKETING Promotion – Concept and elements; Advertising, Personal Selling, Sales Promotion and Public Relations	

MONTH: OCTOBER 2021	PERCENTAGE OF SYLLABUS COVERED: 10 %
UNIT 6 : STAFFING Staffing: Concept and importance Staffing process Recruitment process Selection – process Training and Development - Concept and importance, Methods of training - on the job and off the job - vestibule training, apprenticeship training and internship training	

MONTH: NOVEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: 10 %
Unit 7: Directing <ul style="list-style-type: none"> • Concept and importance • Elements of Directing - Supervision- concept, functions of a supervisor. - Motivation- concept, Maslow's hierarchy of needs, Financial and non-financial incentives. - Leadership- concept, styles- authoritative, democratic and laissez faire. - Communication-concept, formal and informal communication	
Unit 8: Controlling <ul style="list-style-type: none"> • Concept and importance. • Steps in the process of control 	

MONTH: DECEMBER 2021	PERCENTAGE OF SYLLABUS COVERED: _15 %
PART B: BUSINESS FINANCE AND MARKETING Unit 9: Financial Management <ul style="list-style-type: none"> • Concept , role and objective of Financial Management. • Financial Decisions: investment, financing and dividend- Meaning and factors affecting. • Financial Planning- concept and importance. • Capital Structure – Concept and factors affecting capital structure • Fixed and Working Capital - Concept and factors affecting their requirements. Unit 10: Financial Markets <ul style="list-style-type: none"> • Financial Markets: Concept , functions and types. • Money market and its instruments. • Capital market and its types (primary and secondary), methods of floatation in primary market Stock Exchange – Meaning, Functions and trading procedure Securities and Exchange Board of India (SEBI) - objectives and	

MONTH: JANUARY 2022	PERCENTAGE OF SYLLABUS COVERED: 15 %
Unit 12: Consumer Protection <ul style="list-style-type: none"> • Concept and importance of consumer protection. • Consumer Protection Act 1986 - Meaning of consumer and consumer protection - Rights and responsibilities of consumers - Who can file a complaint and against whom? - Redressal machinery. - Remedies available. PROJECT WORK	

MONTH: FEBRUARY 2022

PERCENTAGE OF SYLLABUS COVERED: _____ %

REVISION