

Ref. No. AA/VI-RAC/ 99

Date: 03.06.2026

Notice

All the candidates, who have applied for recruitment of Principal/PGT/TGT/PRT for School teaching positions advertised vide Advt. No. 24/2023-2024 dated 05.12.2025 in the Central Hindu Boys' School, Central Hindu Girls' School & Shri Ranveer Sanskrit Vidyalaya, BHU, are hereby informed that Computer Based Test (CBT) for recruitment on aforesaid posts will be held shortly. All the candidates shall be called for CBT without any scrutiny of their application form. Mere appearance in the Computer Based Test (CBT) does not entitle a candidate to be considered for further process unless the candidate fulfils the eligibility conditions. **APPLICANTS MUST FULLY SATISFY THEMSELVES ABOUT THEIR ELIGIBILITY AS PRESCRIBED IN THE ADVERTISEMENT, BEFORE APPEARING IN THE TEST.** If an applicant is inadvertently allowed to appear at the Test who otherwise does not fulfil the minimum eligibility requirements, he/she cannot, at a later date, use that as a right to claim that he/she meets the eligibility requirements. The University reserves the right to cancel the candidature of a candidate/ or cancel the appointment if it is found that:

- i. Minimum eligibility requirements are not fulfilled.
- ii. False documentation has been done.
- iii. Any other similar valid reason.

The scheme of examination shall be followed as per KVS norms. The details of which are given as under-

For the post of the Principal:

There will be two papers. The 1st and 2nd papers will be of 150 marks each (150 objective-type multiple-choice questions in each paper), carrying 01 mark per question. There will be negative marking of 0.25 mark for each incorrect answer. The duration of the written test will be 150 minutes per paper without any time limit for each part individually.

Paper-I

Part I - Proficiency in Languages (30 marks):

- A. General English-15 questions
- B. General Hindi-15 questions

Part-II - Perspectives on Education and Leadership (120 marks)

- (a) Perspectives in Education (30 questions)
- (b) Understanding the Learner (15 questions)
- (c) Understanding Teaching Learning (30 questions)
- (d) Creating Conducive Learning Environment (15 questions)
- (e) School Organization and Leadership (30 questions)

Paper-II

Part I - General awareness, Reasoning & Proficiency in Computers (50 marks)

1. General Awareness & Current Affairs (20 Questions)
2. Reasoning Ability (20 Questions)

3. Computer Literacy - (10 Questions)

Part-II: Administration and Finance (100 marks)

The Interview is of 60 marks (30+30).

- The candidate would be expected to present his/her vision for overall school improvement through a School Development Plan (could be based on the previous school served) (30 marks)
- Question-Answer/Interview round (30 marks)

The weightage of Written Test and Interview will be 80:20. The final merit list will be based on the performance of candidates in Written Test and Interview taken together.

For Post Graduate Teachers (PGT):

The written Test is of 180 marks (180 objective type multiple choice questions) carrying 01 mark for each question. There will be negative marking of 0.25 mark for each incorrect answer. The duration of the written Test will be 180 minutes without any time limit for each part individually.

Part I - Proficiency in Languages (20 marks):

- A. General English-10 questions
- B. General Hindi-10 questions

Part II - General awareness, Reasoning & Proficiency in Computers (20 marks)

- 1. General Awareness & Current Affairs (10 questions)
- 2. Reasoning Ability (5 questions)
- 3. Computer Literacy (5 questions)

Part III - Perspectives on Education and Leadership (40 questions)

- (a) Understanding the Learner-(15 questions)
 - (b) Understanding Teaching Learning -(15 questions)
 - (c) Creating Conducive Learning Environment
 - (d) School Organisation and Leadership-
 - (e) Perspectives in Education
- (10 questions)

Part IV - Subject-specific Syllabus (100 marks) - Refer Annexure

Professional Competency Test:

The Professional Competency Test is of 60 marks (Demo Teaching - 30 marks and Interview – 30 Marks).

Note:

The weightage of Written Test & Professional Competency (Demo Teaching: 15 and Interview: 15) will be 70:30. The final merit list will be based on the performance of the candidate in Written Test & Professional Competency Test taken together.

For the post of Trained Graduate Teachers (TGT):

The written Test is of 180 marks (180 objective-type multiple-choice questions), each carrying 01 mark. There will be negative marking of 0.25 mark for each incorrect answer. The duration of the written Test will be 180 minutes without any time limit for each part individually.

Part I - Proficiency in Languages (20 marks):

- A. General English-10 questions.
- B. General Hindi-10 questions

Part II - General awareness, Reasoning & Proficiency in Computers (20 marks)

- 1. General Awareness & Current Affairs (10 questions)
- 2. Reasoning Ability (5 questions)
- 3. Computer Literacy (5 questions)

Part-III: Perspectives on Education and Leadership (40 questions)

- (a) Understanding the Learner-(10 questions)
 - (b) Understanding Teaching Learning -(15 questions)
 - (c) Creating Conducive Learning Environment
 - (d) School Organisation and Leadership
 - (e) Perspectives in Education
- } (15 questions)

Part IV - Subject-specific Syllabus (100 marks)

Professional Proficiency Test:

The Professional Competency Test is of 60 marks (including Demo Teaching - 30 marks and Interview - 30 Marks).

Note:

The weightage of Written Test & Professional Competency (Demo Teaching: 15 and Interview: 15) will be 70:30. The final merit list will be based on the performance of the candidate in Written Test & Professional Competency Test taken together.

For post of Trained Graduate Teachers (TGT) (Physical & Health Education and Art Education):

The written Test is of 180 marks (180 objective-type multiple-choice questions), each carrying 01 mark. There will be negative marking of 0.25 mark for each incorrect answer. The duration of the written Test will be 180 minutes without any time limit for each part individually.

Part I - Proficiency in Languages (30 Marks)

- A. General English (15 Marks) (15 questions)
Reading comprehension, word power, Grammar & usage
- B. General Hindi (15 Marks) (15 questions)

पठन कौशल, शब्द सामर्थ्य, व्याकरण एवं प्रयुक्ति

Part II - General Awareness, Reasoning & Proficiency in Computers (50 Marks)

1. General Knowledge & Current Affairs related to the subject/discipline (20 questions)
2. Reasoning Ability (20 questions)
3. Computer Literacy (10 questions)

Part III - Subject-specific Syllabus (100 Marks) (100 Questions) Refer Annexures

Professional Competency Test:

The Professional Competency Test is 60 marks – Demo Teaching (30 marks) and Interview (30 Marks).

Note:

The weightage of Written Test and Professional Competency (Demo Teaching & Interview) will be in the ratio of 70:30. Final merit list will be based on the performance of the candidate in Written Test & Professional Competency Test taken together.

For Primary Teachers (PRT):

The written Test is of 180 marks (180 objective-type multiple-choice questions), each carrying 01 mark. There will be negative marking of 0.25 mark for each incorrect answer. The duration of the written Test will be 180 minutes without any time limit for each part individually.

Part I - Proficiency in Languages (20 marks):

- A. General English (10 questions)
- B. General Hindi (10 questions)

Part II - General awareness, Reasoning & Proficiency in Computers (20 marks)

1. General Awareness & Current Affairs (10 questions)
2. Reasoning Ability (5 questions)
3. Computer Literacy (5 questions)

Part III - Perspectives on Education and Leadership (60 questions)

- (a) Understanding the Learner (15 questions)
- (b) Understanding Teaching Learning (15 questions)
- (c) Creating Conducive Learning Environment (10 questions)
- (d) School Organisation and Leadership (10 questions)
- (e) Perspectives in Education (10 questions)

Part IV - Subject-specific Syllabus (80 marks)

Professional Competency Test:

The Professional Competency Test is of 60 marks (Demo Teaching - 30 marks and Interview - 30 Marks).

Note:

The weightage of Written Test & Professional Competency (Demo Teaching: 15 and Interview: 15) will be 70:30. The final merit list will be based on the candidate's performance in the Written Test & Professional Competency Test taken together.

Important Instruction:

1. There will be minimum qualifying marks in the CBT for the appointment to different posts of school teachers. The minimum percentage marks for the General, OBC and EWSs candidates will be 40% of the total CBT score and the minimum marks for the SC, ST and PwBD candidates shall be 35% of the total CBT score. However, the Vice-Chancellor may by reasons recorded in the writing review the minimum marks for selection. In the event of a tie, when two candidates obtain equal marks in the CBT, the senior candidate in age shall be treated as higher in merit.
2. The eligibility of the candidates will be checked and verified before finalising selection. Only those candidates who are found to fulfil all the qualifications and eligibility conditions shall be considered for selection to the advertised posts based on their scores.
3. All candidates who have applied for the advertised positions may be called for the Written Test without any screening. The number of eligible candidates to be called for Professional Competency Test/Interview shall be ten (10) candidates as per merit in the written test for each advertised post in each category. For each additional post in each category, five (5) additional candidates as per merit in the written test will be added to list of candidates qualifying for Professional Competency Test/Interview.

-Sd/

Deputy Registrar
(Recruitment & Assessment Cell)

TIER II : Detailed syllabus for the post of Principal

I Prospective on Education and Leadership:

A	Understanding the Learner
	▪ Concept of growth, maturation and development, principles and debates of development, ▪ Development tasks and challenges with special reference to the foundational, preparatory, middle and secondary school children ▪ Domains of Development: Physical, Cognitive, Socio-emotional, Moral etc., deviations in development and its implications. ▪ Role of Primary and Secondary Socialization agencies. Steps to ensure Home school continuity. ▪ Mental Health and Well Being.
B	Understanding Teaching Learning
I	Theoretical perspectives on Learning -Behaviorism, Cognitivism and Constructivism with special reference to their implications for: • The role of Principal • Role of Vice-Principal and HM • The role of teacher • The role of learner • Nature of teacher-student relationship • Innovative Pedagogical Practices • Productive Classroom environment • Understanding of discipline, power etc.
II	Factors affecting learning and their implications for: • Designing classroom instructions, • Planning student activities and, • Creating learning spaces in school
C	Planning and Organization of Teaching-Learning
	• Concept of Syllabus and Curriculum, Overt and Hidden Curriculum • Preparation of School Time-table • Foundational Literacy and Numeracy, Early Childhood Care and Education • Competency Based Lesson Planning. • Competency Based Assessment • Instructional Material and Resources • Digital Technology in Teaching Learning • Classroom Observation, Feedback and Follow-up, Reflections and Dialogues as a means of constructivist teaching
D	Creating Conducive Learning Environment
	• Inclusive Education: The concepts of Diversity, disability and Inclusion, implications of disability as social construct, types of disabilities-their identification and interventions • Concept of School Mental Health & Well Being. Addressing the curative, preventive and promotive dimensions of mental health for all students and staff. Provisioning for guidance and counselling. • Developing School and community as a learning resource. • Right of Person with Disability Act-2016 as amended from time to time.
E	School Organization and Leadership

	• Leader as reflective practitioner, team builder, initiator, coach and mentor. • Perspectives on School Leadership: instructional, distributed and transformative • Vision building, goal setting and creating a School development Plan • Using School Processes and forums for strengthening teaching learning-Annual Calendar, time-tabling, parent teacher forums, school assembly, teacher development forums, using achievement data for improving teaching-learning, School Self-Assessment and Improvement • Creating partnerships with community, industry and other neighboring schools and Higher Education Institutes – forming learning communities, • School Accreditation.
F	Perspectives in Education
	• Role of school in achieving aims of education. • Educational Policies of Govt of India • National Education Policy-2020 • National Curriculum Framework Foundational Stage-2022 • National Curriculum Framework for School Education-2023 • NIPUN Bharat Mission • Guiding Principles for Child Rights, Protecting and provisioning for rights of children to safe and secure school environment, • Right of Children to free and Compulsory Education Act, 2009, • Historically studying the National Policies in education with special reference to school education; • School Curriculum Principles: Perspective, Learning and Knowledge, Curricular Areas, School Stages – Pedagogy & Assessment

II Management, Supervision and Leadership

Management: its nature and scope; The Management Processes; Planning, Organization, Staffing, Directing and Controlling; The Role of a Manager in an Organization. Leadership: The Tasks of a Leader, Leadership Styles; Leadership Theories; A successful Leader versus an effective Leader. Human Resource Development: Concept of HRD; Goals of HRD; Performance Appraisal — Potential appraisal and development — Feedback and Performance Counseling — Career Planning — Training and Development — Rewards — Employee Welfare. Motivation, Morale and Incentives: Theories of Motivation; How Managers Motivate; Concept of Morale; Factors determining morale; Role of Incentives in Building up Morale. Communication: Steps in the Communication Process; Communication Channels; Oral versus Written Communication; Verbal versus non-verbal Communication; upward, downward and lateral Communication; Barriers to Communication, Role of Information Technology. Class Observation and School Supervision. Ethics in School Management. Emotional Intelligence.

III Administration and Finance

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- Office Procedure & Office Management
 - CCS (CCA) Rules 1965
 - CCS (Conduct) Rules 1964
 - Fundamental & Supplementary Rules
 - TA Rules
 - Leave Travel Concession Rule.
 - Principles of School Budget
 - Medical Attendance Rules & CGHS
 - Right to Information Act 2005
 - Contract Labour (Abolition and Regulation) Act, 1970
 - Income Tax & GST
 - POSH & POCSO Acts
 - MoE, NCPCR and NDMA guidelines for school safety and security
 - Constitutional Provisions for PwBD, EWS, SC/ST and other disadvantaged groups
 - General Financial Rules – 2017
 - CCS(Pension) Rules 2021, NPS
 - Human Rights

TIER II : Detailed syllabus for the post of Vice- Principal

I Prospective on Education and Leadership:

A	Understanding the Learner
	▪ Concept of growth, maturation and development, principles and debates of development, ▪ Development tasks and challenges with special reference to the foundational, preparatory, middle and secondary school children ▪ Domains of Development: Physical, Cognitive, Socio-emotional, Moral etc., deviations in development and its implications. ▪ Role of Primary and Secondary Socialization agencies. Steps to ensure Home school continuity. ▪ Mental Health and Well Being.
B	Understanding Teaching Learning
I	Theoretical perspectives on Learning -Behaviorism, Cognitivism and Constructivism with special reference to their implications for: • The role of Principal • Role of Vice-Principal and HM • The role of teacher • The role of learner • Nature of teacher-student relationship • Innovative Pedagogical Practices • Productive Classroom environment • Understanding of discipline, power etc.
II	Factors affecting learning and their implications for: • Designing classroom instructions, • Planning student activities and, • Creating learning spaces in school
C	Planning and Organization of Teaching-Learning

III Administration and Finance

- Office Procedure & Office Management
- CCS (CCA) Rules 1965
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- POSH & POCSO Acts
- MoE, NCPCR and NDMA guidelines for school safety and security
- Constitutional Provisions for PwD, EWS, SC/ST and other disadvantaged groups
- General Financial Rules – 2017
- CCS(Pension) Rule 2021, NPS
- Human Rights.

TIER II : Syllabus - PGT (Mathematics)

Sets:

Sets and their representations, Empty set, Finite and Infinite sets, Equal sets, Subsets. Subsets of a set of real numbers especially intervals (with notations). Universal set. Venn diagrams. Union and Intersection of sets. Difference of sets. Complement of a set. Properties of Complement.

Relations & Functions:

Ordered pairs. Cartesian product of sets. Number of elements in the Cartesian product of two finite sets. Cartesian product of the set of reals with itself (upto $R \times R \times R$). Definition of relation, pictorial diagrams, domain, co-domain and range of a relation. Function as a special type of relation. Pictorial representation of a function, domain, co-domain and range of a function. Real valued functions, domain and range of these functions, constant, identity, polynomial, rational, modulus, signum, exponential, logarithmic and greatest integer functions, with their graphs. Sum, difference, product and quotients of functions.

Trigonometric Functions

Positive and negative angles. Measuring angles in radians and in degrees and conversion from one measure to another. Definition of trigonometric functions with the help of unit circle. Truth of the identity $\sin^2 x + \cos^2 x = 1$, for all x . Signs of trigonometric functions. Domain and range of trigonometric functions and their graphs. Expressing $\sin(x \pm y)$ and $\cos(x \pm y)$ in terms of $\sin x$, $\sin y$, $\cos x$ & $\cos y$ and their simple applications. Identities related to $\sin 2x$, $\cos 2x$, $\tan 2x$, $\sin 3x$, $\cos 3x$ and $\tan 3x$.

Complex Numbers and Quadratic Equations

Need for complex numbers, especially $\sqrt{-1}$, to be motivated by inability to solve some of the quadratic equations. Algebraic properties of complex numbers. Argand plane

Linear Inequalities

Linear inequalities. Algebraic solutions of linear inequalities in one variable and their representation on the number line.

Permutations and Combinations

Fundamental principle of counting. Factorial n . $(n!)$ Permutations and combinations, derivation of Formulae for nPr and nCr and their connections, simple applications.

Binomial Theorem

Historical perspective, statement and proof of the binomial theorem for positive integral indices.

Pascal's triangle, simple applications.

Sequence and Series

Sequence and Series. Arithmetic Progression (A. P.). Arithmetic Mean (A.M.) Geometric Progression (G.P.), general term of a G.P., sum of n terms of a G.P., infinite G.P. and its sum, geometric mean (G.M.), relation between A.M. and G.M.

Straight Lines

Slope of a line and angle between two lines. Various forms of equations of a line: parallel to axis, point-slope form, slope-intercept form. Distance of a point from a line.

Conic Sections

Sections of a cone: circles, ellipse, parabola, hyperbola, a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section. Standard equations and simple properties of parabola, ellipse and hyperbola. Standard equation of a circle.

Introduction to Three-dimensional Geometry

Coordinate axes and coordinate planes in three dimensions. Coordinates of a point. Distance between two points.

Limits and Derivatives

Derivative introduced as rate of change both as that of distance function and geometrically. Intuitive idea of limit. Limits of polynomials and rational functions trigonometric, exponential and logarithmic functions. Definition of derivative relate it to slope of tangent of the curve, derivative of sum, difference, product and quotient of functions. Derivatives of polynomial and trigonometric functions.

Statistics

Measures of Dispersion: Range, Mean deviation, variance and standard deviation of ungrouped/grouped data.

Probability

Random experiments; outcomes, sample spaces (set representation). Events; occurrence of events, 'not', 'and' and 'or' events, exhaustive events, mutually exclusive events, Axiomatic (set theoretic) probability, connections with other theories of earlier classes. Probability of an event, probability of 'not', 'and' and 'or' events.

Relations and Functions

Types of relations: reflexive, symmetric, transitive and equivalence relations. One to one and onto functions.

Inverse Trigonometric Functions

Definition, range, domain, principal value branch. Graphs of inverse trigonometric functions.

Matrices

Concept, notation, order, equality, types of matrices, zero and identity matrix, transpose of a

matrix, symmetric and skew symmetric matrices. Operation on matrices: Addition and multiplication and multiplication with a scalar. Simple properties of addition, multiplication and scalar multiplication. On commutativity of multiplication of matrices and existence of non-zero matrices whose product is the zero matrix (restrict to square matrices of order 2). Invertible matrices and proof of the uniqueness of inverse, if it exists; (Here all matrices will have real entries).

Determinants

Determinant of a square matrix (up to 3×3 matrices), minors, co-factors 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.

Continuity and Differentiability

Continuity and differentiability, derivative of composite functions, chain rule, derivative of inverse trigonometric functions, derivative of implicit functions. Concept of exponential and logarithmic functions. Derivatives of logarithmic and exponential functions. Logarithmic differentiation, derivative of functions expressed in parametric forms. Second order derivatives.

Applications of Derivatives

Applications of derivatives: rate of change of bodies, increasing/decreasing functions, 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).

Integrals

Integration as inverse process of differentiation. Integration of a variety of functions by substitution, by partial fractions and by parts, Evaluation of simple integrals of the following types and problems based on them.

$$\int \frac{dx}{x^2 \pm a^2}, \int \frac{dx}{\sqrt{x^2 \pm a^2}}, \int \frac{dx}{\sqrt{a^2 - x^2}}, \int \frac{dx}{ax^2 + bx + c}, \int \frac{dx}{\sqrt{ax^2 + bx + c}}$$

$$\int \frac{px + q}{ax^2 + bx + c} dx, \int \frac{px + q}{\sqrt{ax^2 + bx + c}} dx, \int \sqrt{a^2 \pm x^2} dx, \int \sqrt{x^2 - a^2} dx$$

$$\int \sqrt{ax^2 + bx + c} dx,$$

Fundamental Theorem of Calculus. Basic Properties of definite integrals and evaluation of definite integrals;

Applications of the Integrals

Applications in finding the area under simple curves, especially lines, circles/ parabolas/ellipses (in standard form only)

Differential Equations

Definition, order and degree, general and particular solutions of a differential equation. Solution of differential equations by method of separation of variables, solutions of homogeneous differential equations of first order and first degree. Solutions of linear differential equation of the type: $dy/dx + py = q$, where p and q are functions of x or constants. $dx/dy + px = q$, where p and q are functions of y or constants.

Vectors

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

of a vector. 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. Definition, Geometrical Interpretation, properties and application of scalar (dot) product of vectors, vector (cross) product of vectors.

Three - dimensional Geometry

Direction cosines and direction ratios of a line joining two points. Cartesian equation and vector equation of a line, skew lines, shortest distance between two lines. Angle between two lines.

Linear Programming

Introduction, related terminology such as constraints, objective function, optimization, graphical method of solution for problems in two variables, feasible and infeasible regions (bounded or unbounded), feasible and infeasible solutions, optimal feasible solutions (up to three non-trivial constraints).

Probability

Conditional probability, multiplication theorem on probability, independent events, total probability, Bayes' theorem, Random variable and its probability distribution, mean of random variable.

Units and Measurements

Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units, significant figures. Dimensions of physical quantities, dimensional analysis and its applications.

Motion in a Straight Line

Frame of reference, Motion in a straight line, Elementary concepts of differentiation and integration for describing motion, uniform and non- uniform motion, and instantaneous velocity, uniformly accelerated motion, velocity - time and position-time graphs, Relations for uniformly accelerated motion .

Motion in a Plane

Scalar and vector quantities; position and displacement vectors, general vectors and their notations; equality of vectors, multiplication of vectors by a real number; addition and subtraction of vectors, Unit vector; resolution of a vector in a plane, rectangular components, Scalar and Vector product of vectors. Motion in a plane, cases of uniform velocity and uniform acceleration, projectile motion, uniform circular motion.

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. Law of conservation of linear momentum and its applications. Equilibrium of concurrent forces, Static and kinetic friction, laws of friction, rolling friction, lubrication. Dynamics of uniform circular motion: Centripetal force, examples of circular motion- vehicle on a level circular road, vehicle on a banked road.

Work, Energy and Power:

Work done by a constant force and a variable force; kinetic energy, work-energy theorem, power, Notion of potential energy, potential energy of a spring, conservative forces: non-conservative forces, motion in a vertical circle; elastic and inelastic collisions in one and two dimensions.

Motion of System of Particles and Rigid Body & System of Particles and Rotational Motion

Centre of mass of a two-particle system, momentum conservation and Centre of mass motion, Centre of mass of a rigid body; centre of mass of a uniform rod, Moment of a force, torque, angular momentum, law of conservation of angular momentum and its applications, Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motions. Moment of inertia, radius of gyration, values of moments of inertia for simple geometrical objects.

Gravitation:

Kepler's laws of planetary motion, universal law of gravitation, Acceleration due to gravity and its variation with altitude and depth. Gravitational potential energy and gravitational potential, escape velocity, orbital velocity of a satellite.

Mechanical Properties of Solids

Elasticity, Stress-strain relationship, Hooke's law, Young's modulus, bulk modulus, shear modulus of rigidity, Poisson's ratio; elastic energy.

Mechanical Properties of Fluids

Pressure due to a fluid column; Pascal's law and its applications -hydraulic lift and hydraulic brakes, effect of gravity on fluid pressure, Viscosity, Stokes' law, terminal velocity, streamline and turbulent flow, critical velocity, Bernoulli's theorem and its simple applications, Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, application of surface tension ideas to drops, bubbles and capillary rise.

Thermal Properties of Matter

Heat, temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; C_p , C_v - calorimetry; change of state - latent heat capacity. Heat transfer-conduction, convection and radiation, thermal conductivity, qualitative ideas of Blackbody radiation, Wein's displacement Law, Stefan's law.

Thermodynamics

Thermal equilibrium and definition of temperature, zeroth law of thermodynamics, heat, work and internal energy, First law of thermodynamics, Second law of thermodynamics: gaseous state of matter, change of condition of gaseous state -isothermal, adiabatic, reversible, irreversible, and cyclic processes.

Behavior of Perfect Gases and Kinetic Theory of Gases :

Equation of state of a perfect gas, work done in compressing a gas, Kinetic theory of gases - assumptions, concept of pressure. Kinetic interpretation of temperature; rms speed of gas molecules; degrees of freedom, law of equi-partition of energy and application to specific heat capacities of gases; concept of mean free path, Avogadro's number.

Oscillations and Waves:

Periodic motion - time period, frequency, displacement as a function of time, periodic functions and their application, Simple harmonic motion (S.H.M) and its equations of motion; phase; oscillations of a loaded spring- restoring force and force constant; energy in S.H.M. Kinetic and potential energies; simple pendulum -its time period. Transverse and longitudinal waves, speed of travelling wave, displacement relation for a progressive wave, principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats.

Electric Charges and Fields:

Electric charges, Conservation of charge, Coulomb's law-force between two point charges, forces between multiple charges; superposition principle and continuous charge distribution, Electric field, electric field due to a point charge, electric field lines, electric dipole, electric field due to a dipole, torque on a dipole in uniform electric field. Electric flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell-field inside and outside.

Magnetism and Matter

Bar magnet, bar magnet as an equivalent solenoid (qualitative treatment only), magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis (qualitative treatment only), torque on a magnetic dipole (bar magnet) in a uniform magnetic field (qualitative treatment only), magnetic field lines. Magnetic properties of materials- Para-, dia- and ferro - magnetic substances with examples, Magnetization of materials, effect of temperature on magnetic properties.

Electromagnetic Induction and Alternating Currents

Electromagnetic induction; Faraday's laws, induced EMF and current; Lenz's Law, Self and mutual induction, Alternating Current Alternating currents, peak and RMS value of alternating current/voltage; reactance and impedance; LCR series circuit, resonance, power in AC circuits, power factor, wattless current, AC generator, Transformer.

Electromagnetic Waves

Basic idea of displacement current, Electromagnetic waves, their characteristics, their transverse nature (qualitative idea only). Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, X-rays, gamma rays) including elementary facts about their uses.

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Ray Optics and Optical Instruments Ray Optics:

Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and optical fibers, refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of a lens, combination of thin lenses in contact, refraction of light through a prism. Optical instruments: Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers.

Wave optics:

Wave front and Huygen's principle, reflection and refraction of plane wave at a plane surface using wave fronts, Proof of laws of reflection and refraction using Huygen's principle. Interference, Young's double slit experiment and expression for fringe width, coherent sources and sustained interference of light, diffraction due to a single slit, width of central maxima.

Dual Nature of Radiation and Matter:

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.

Atoms & Nuclei:

Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model of hydrogen atom, Expression for radius of n th possible orbit, velocity and energy of electron in its orbit, hydrogen line spectra, Composition and size of nucleus, nuclear force Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear fusion.

Semiconductor Electronics:

Energy bands in conductors, semiconductors and insulators, Intrinsic and extrinsic semiconductors- p and n type, p-n junction Semiconductor diode - I-V characteristics in forward and reverse bias, application of junction diode - diode as a rectifier.

TIER II: Syllabus - PGT (Economics)

Introduction

Meaning, scope, functions and importance of statistics in Economics

Collection, Organisation and Presentation of data

- Collection of data - sources of data - primary and secondary; how basic data is collected with concepts of Sampling; methods of collecting data; some important sources of secondary data: Census of India and National Sample Survey Organisation.
- Organisation of Data: Meaning and types of variables; Frequency Distribution.
- Presentation of Data: Tabular Presentation and Diagrammatic Presentation of Data: (i) Geometric forms (bar diagrams and pie diagrams), (ii) Frequency diagrams (histogram, polygon and Ogive) and (iii) Arithmetic line graphs (time series graph).

Statistical Tools and Interpretation

- Measures of Central Tendency- Arithmetic mean, median and mode
- Correlation – meaning and properties, scatter diagram; Measures of correlation - Karl Pearson's method (two variables ungrouped data) Spearman's rank correlation.
- Introduction to Index Numbers - meaning, types - wholesale price index, consumer price index and index of industrial production, uses of index numbers; Inflation and index numbers.

Introduction to Microeconomics

- Meaning of microeconomics and macroeconomics; positive and normative economics
- What is an economy? Central problems of an economy: what, how and for whom to produce; concepts of production possibility frontier and opportunity cost.

Consumer's Equilibrium and Demand

- Consumer's equilibrium - meaning of utility, marginal utility, law of diminishing marginal utility, conditions of consumer's equilibrium using marginal utility analysis.
- Indifference curve analysis of consumer's equilibrium-the consumer's budget (budget set and budget line), preferences of the consumer (indifference curve, indifference map) and conditions of consumer's equilibrium.
- Demand, market demand, determinants of demand, demand schedule, demand curve and its slope, movement along and shifts in the demand curve; price elasticity of demand - factors affecting price elasticity of demand; measurement of price elasticity of demand - percentage-change method and total expenditure method.

Producer Behaviour and Supply

- Meaning of Production Function – Short-Run and Long-Run
- Total Product, Average Product and Marginal Product.
- Returns to a Factor
- Cost: Short run costs - total cost, total fixed cost, total variable cost; Average cost; Average fixed cost, average variable cost and marginal cost-meaning and their relationships.
- Revenue - total, average and marginal revenue - meaning and their relationship.
- Producer's equilibrium-meaning and its conditions in terms of marginal revenue marginal cost. Supply, market supply, determinants of supply, supply schedule, supply curve and its slope, movements along and shifts in supply curve, price elasticity of supply; measurement of price elasticity of supply - percentage-change method.

Forms of Market and Price Determination under Perfect Competition with simple applications.

- Perfect competition - Features; Determination of market equilibrium and effects of shifts

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in demand and supply.

- Simple Applications of Demand and Supply: Price ceiling, price floor.

National Income and Related Aggregates

- Basic concepts in macroeconomics: consumption goods, capital goods, final goods, intermediate goods; stocks and flows; gross investment and depreciation.
- Circular flow of income (two sector model); Methods of calculating National Income - Value Added or Product method, Expenditure method, Income method.
- Aggregates related to National Income: Gross National Product (GNP), Net National Product (NNP), Gross Domestic Product (GDP) and Net Domestic Product (NDP) - at market price, at factor cost; Real and Nominal GDP.
- GDP and Welfare

Money and Banking

- Money – meaning and functions, supply of money - Currency held by the public and net demand deposits held by commercial banks.
- Money creation by the commercial banking system.
- Central bank and its functions (example of the Reserve Bank of India): Bank of issue, Govt. Bank, Banker's Bank, Control of Credit through Bank Rate, CRR, SLR, Repo Rate and Reverse Repo Rate, Open Market Operations, Margin requirement.

Determination of Income and Employment

- Aggregate demand and its components.
- Propensity to consume and propensity to save (average and marginal).
- Short-run equilibrium output; investment multiplier and its mechanism.
- Meaning of full employment and involuntary unemployment.
- Problems of excess demand and deficient demand; measures to correct them - changes in government spending, taxes and money supply.

Government Budget and the Economy

- Government budget - meaning, objectives and components.
- Classification of receipts - revenue receipts and capital receipts;
- Classification of expenditure – revenue expenditure and capital expenditure.
- Balanced, Surplus and Deficit Budget – measures of government deficit.

Balance of Payments

- Balance of payments account - meaning and components;
- Balance of payments – Surplus and Deficit
- Foreign exchange rate - meaning of fixed and flexible rates and managed floating.
- Determination of exchange rate in a free market, Merits and demerits of flexible and fixed exchange rate. Managed Floating exchange rate system

Development Experience (1947-90) and Economic Reforms since 1991:

- A brief introduction of the state of Indian economy on the eve of independence. Indian economic system and common goals of Five Year Plans.
- Main features, problems and policies of agriculture (institutional aspects and new agricultural strategy), industry (IPR 1956; SSI – role & importance) and foreign trade.
- Economic Reforms since 1991:
Features and appraisals of liberalisation, globalisation and privatisation (LPG policy); Concepts of demonetization and GST

Current challenges facing Indian Economy

- Human Capital Formation: How people become resource; Role of human capital in economic development; Growth of Education Sector in India

- Rural development: Key issues - credit and marketing - role of cooperatives; agricultural diversification; alternative farming - organic farming
- Employment: Growth and changes in work force participation rate in formal and informal sectors; problems and policies
- Sustainable Economic Development: Meaning, Effects of Economic Development on Resources and Environment, including global warming

Development Experience of India:

- A comparison with neighbours
- Issues: economic growth, population, sectoral development and other Human Development Indicators

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TIER II : Syllabus - PGT (History)

Writing and City Life

Iraq, 3rd millennium BCE

- Growth of towns
- Nature of early urban societies
- Historians' Debate on uses of writing

An Empire across Three Continents

Roman Empire, 27 BCE to 600 CE

- Political evolution
- Economic Expansion
- Religion-culture foundation
- Late Antiquity
- Historians' view on the Institution of Slavery

NOMADIC EMPIRES

The Mongol, 13th to 14th century

- The nature of nomadism
- Formation of empires
- Conquests and relations with other states
- Historians' views on nomadic societies and state formation

The Three Orders.

Western Europe 13th - 16th century

- Feudal society and economy
- Formation of state
- Church and society
- Historians' views on decline of feudalism

Changing Cultural Traditions

Europe 14th - 17th century

- New ideas and new trends in literature and arts
- Relationship with earlier ideas
- The contribution of West Asia
- Historians' viewpoint on the validity of the notion 'European Renaissance'

Displacing Indigenous People

North America and Australia, 18th to 20th century

- European colonists in North America and Australia
- Formation of White Settler societies
- Displacement and repression of local people
- Historians' viewpoint on the impact of European settlement on indigenous population

Paths to Modernization

East Asia, late 19th to 20th century

- Militarization and economic growth in Japan
- China and the communist alternative
- Historians' Debate on the meaning of modernization

BRICKS, BEADS AND BONES

The Harappan Civilization

- Broad overview: Early urban centers
- Story of discovery: Harappan civilization
- Excerpt: Archaeological report on a major site

KINGS, FARMERS AND TOWNS:

- Early States and Economies (c. 600 BCE-600 CE)
- Broad overview: Political and economic History from the Mauryan to the Gupta period
- Story of discovery: Inscriptions and the Decipherment of the script. Shifts in the Understanding of political and economic history.
- Excerpt: Ashokan inscription and Gupta period land grant

KINSHIP, CASTE AND CLASS

Early Society Societies (C. 600 BCE-600 CE)

- Broad overview: Social Histories: Using the Mahabharata
- Issues in social history, including caste, class, kinship and gender
- Story of discovery: Transmission and publications of the Mahabharat
- Excerpt: from the Mahabharata, illustrating how it has been used by historians.

THINKERS, BELIEFS AND BUILDINGS

Cultural Developments (c. 600 BCE - 600 CE)

- Broad overview: A History of Buddhism: Sanchi Stupa a) A brief review of religious histories of Vedic religion, Jainism, Vaishnavism, Shaivism (Puranic Hinduism) b) Focus on Buddhism.
- Story of discovery: Sanchi stupa. Excerpt: Reproduction of sculptures from Sanchi.

THROUGH THE EYES OF TRAVELLERS

Perceptions of Society (tenth to seventeenth century)

- Broad Overview: outlines of social and cultural life as they appear in traveller's account.
- Story of their writings: A discussion of where they travelled, what they wrote and for whom they wrote.
- Excerpts: from Al Biruni, Ibn Battuta, Francois Bernier.

BHAKTI –SUFİ TRADITIONS:

Changes in Religious Beliefs and Devotional Texts (eighth to eighteenth centuries)

- Broad overview: a. Outline of religious developments during this period saints. b. Ideas and practices of the Bhakti-Sufi
- Story of Transmission: How Bhakti-Sufi compositions have been preserved.
- Excerpt: Extracts from selected Bhakti-Sufi works

AN IMPERIAL CAPITAL: VIJAYANAGARA(fourteenth to sixteenth centuries)

- Broad Over View: New Architecture: Hampi a. Outline of new buildings during Vijayanagar period-temples, forts, irrigation facilities. b. Relationship between architecture and the political system
- Story of Discovery: Account of how Hampi was found.
- Excerpt: Visuals of buildings at Hampi

PEASANTS, ZAMINDARS AND THE STATE:

Agrarian Society and the Mughal Empire (c. sixteenth-seventeenth centuries)

- Broad overview: The Aini-Akbari a. Structure of agrarian relations in the 16th and 17th centuries. b. Patterns of change over the period.
- Story of Discovery: Account of the compilation and translation of Ain I Akbari
- Excerpt: from the Ain-i-Akbari.

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COLONIALISM AND THE COUNTRYSIDE: Exploring Official Archives

- Broad overview: Colonialism and Rural Society: Evidence from Official Reports
 - a) Life of zamindars, peasants and artisans in the late 18th century
 - b). Permanent Settlement, Santhals and Paharias
- Story of official records: An account of why official Investigations in to rural societies were undertaken and the types of records and reports produced.
- Excerpts: From Fifth Report

REBELS AND THE RAJ: 1857 Revolt and its Representations

- Broad overview:
 - a. The eventsof1857-58.
 - b. Vision of Unity
 - c. How these events were recorded and narrated. Focus: Lucknow
- Excerpts: Pictures of 1857.
- Extracts from contemporary accounts.

MAHATMA GANDHI AND THE NATIONALIST MOVEMENT:

- Civil Disobedience and Beyond Broad overview:
 - a. The Nationalist Movement 1918 -48.
 - b. The nature of Gandhian politics and leadership.
- Focus: Mahatma Gandhi and the three movements and his last days as “finest hours”
- Excerpts: Reports from English and Indian language newspapers and other contemporary writings.

FRAMING THE CONSTITUTION:

- The Beginning of a New Era Broad overview: The Making of the Constitution an overview:
 - a. Independence and then new nation state.
 - b. The making of the Constitution
- Focus: The Constituent Assembly Debates
- Excerpts: from the debates

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TIER II : SYLLABUS FOR PGT (ENGLISH)

Section A: Reading

Comprehension

Three or four unseen passages from different genres (prose, poetry, drama, articles, editorials, scientific, and literary extracts).

Questions will test comprehension, inference, vocabulary, tone, rhetorical devices, and logical sequencing.

Section B: Writing Ability

B1. Functional Writing:

Formal and Informal Letters: Business letters, job applications, letters to editors, complaints, and personal letters.

Report Writing: Factual description of events, newspaper reports, and analytical reports. Notices, Circulars, and Press Releases.

B2. Creative and Analytical Writing:

Essay Writing: Argumentative, analytical, reflective, and descriptive essays.

Article/Debate/Speech: Expressing opinions on socio-political, economic, and educational issues.

Section C: Grammar and Usage

Parts of Speech: Nouns, Pronouns, Verbs, Adverbs, Adjectives, Prepositions, Conjunctions. Sentence Structure : Types of sentences, subject-verb agreement, parallelism, and sentence connectors.

Tenses and Their Usage: Active-passive voice, sequence of tenses, and reported speech. Clauses: Noun, adjective, and adverb clauses.

Common Errors: Articles, prepositions, modifiers, redundancy, and word order.

Editing and Proofreading: Error detection, sentence correction, and transformation.

Section D: Literature

D1. British Literature:

Elizabethan and Jacobean Drama: William Shakespeare, Christopher Marlowe, Ben Jonson. Poetry: John Donne, Alexander Pope, William Wordsworth, Samuel Taylor Coleridge, John Keats.

Victorian and Modern Writers: Charles Dickens, Thomas Hardy, Virginia Woolf, T.S. Eliot, George Orwell.

D2. American Literature:

Poets: Robert Frost, Emily Dickinson, Langston Hughes.

Prose and Drama: Arthur Miller, Ernest Hemingway, Mark Twain, Harper Lee.

D3. Indian Writing in English:

R.K. Narayan, Mulk Raj Anand, Anita Desai, Vikram Seth, Arundhati Roy, Amitav Ghosh.

D4. World Literature:

Gabriel García Márquez, Chinua Achebe, Pablo Neruda, Khaled Hosseini.

D5. Literary Criticism and Movements:

Classicism, Romanticism, Modernism, Postmodernism, Feminism, Post colonialism, Structuralism.

TIER II: पाठ्यक्रम स्नातकोत्तर शिक्षक (हिन्दी)

साहित्यिक अभिरुचि परीक्षण

(i) आदिकाल से रीतिकाल

इसके अन्तर्गत कालगत परिस्थितियाँ एवं साहित्य पर उसका प्रभाव, प्रत्येक युग के साहित्य की प्रमुख प्रवृत्तियाँ, प्रमुख रचनाकार एवं उनकी रचनाएँ, साहित्यिक विशेषताएँ, भाषा शैली

(क) आदिकाल - चंदबरदाई, अमीर खुसरो, विद्यापति

(ख) भक्तिकाल - - -

(1) निर्गुण भक्तिधारा - ज्ञानमार्गी शाखा, प्रेममार्गी शाखा, कबीर, दादू, रैदास, नानक, जायसी, कुतुबन

(2) सगुण भक्तिधारा - राम भक्तिशाखा, कृष्ण-भक्ति शाखा, तुलसीदास, केशव, सूरदास, मीराबाई, अष्टछाप के कवि, रसखान

(ग) रीतिकाल - रीतिबद्ध, रीतिसिद्ध, रीतिमुक्त काव्य - देव, घनानंद, बिहारी, मतिराम, सेनापति, भूषण, पद्माकर

(ii) आधुनिक काल

इसके अन्तर्गत युगीन परिस्थितियाँ, साहित्यिक पृष्ठभूमि, मुख्य विचारधारा, मुख्य साहित्यकार, साहित्यिक रचनाएँ, विशेषताएँ, भाषा-शैली

(क) भारतेन्दु युग- भारतेन्दु हरिश्चंद्र, बालमुकुन्दगुप्त, बदरीनारायण चौधरी 'प्रेमधन,

(ख) द्विवेदीयुग- महावीर प्रसाद द्विवेदी, श्रीधर पाठक, अयोध्यासिंह उपाध्याय 'हरिऔध', मैथिलीशरणगुप्त

(ग) छायावाद - जयशंकर प्रसाद, महादेवी वर्मा, सुमित्रानन्दन पंत, सूर्यकान्त त्रिपाठी निराला,

(घ) छायावादोत्तर युग- हरिवंश राय बच्चन, माखनलाल चतुर्वेदी, बालकृष्ण शर्मा 'नवीन', नरेन्द्र शर्मा, केदारनाथ अग्रवाल, नागार्जुन, मुक्तिबोध, नेमिचंद्र जैन, प्रभाकर माचवे, गिरिजा कुमार माथुर, रामविलास शर्मा, 'अज्ञेय' भवानी प्रसाद मिश्र, नरेन्द्र शर्मा, धूमिल, धर्मवीर भारती, शंभुनाथ सिंह, रघुवीर सहाय

(iii) गद्य साहित्य

(क) अधोलिखित लेखकों का व्यक्तित्व और कृतित्व-

भारतेन्दु, रामचंद्र शुक्ल, प्रेमचंद, जैनेन्द्र कुमार, हजारीप्रसाद द्विवेदी, धर्मवीर भारती, रामविलास शर्मा, निर्मल वर्मा, फणीश्वरनाथ रेणु, कृष्णा सोबती, भीष्म साहनी, शेखर जोशी, विष्णु खरे, ममता कालिया

(ख) गद्य एवं अन्य विधाओं का प्रारम्भ, विकास, प्रमुख प्रवृत्तियाँ, प्रमुख साहित्यकार, रचनाएँ, साहित्यिक विशेषताएँ, भाषाशैली

(ग) निबंध, कथासाहित्य, उपन्यास और कहानी, नाटक, एकांकी, रेखाचित्र, संस्मरण, यात्रा-वृत्तान्त, आत्मकथा, जीवनी, पत्र, डायरी, आलोचना, रिपोतार्ज आदि इन सभी विधाओं का विस्तृत परिचय

(iv) साहित्य शास्त्र :-

काव्य स्वरूप, काव्य-आत्मा, काव्य गुण-दोष, शब्द-शक्ति, रस, अलंकार (शब्दालंकार, अर्थालंकार, उभयालंकार एवं नए अलंकार) बिंब, छंद, प्रतीक, भाषा, भाषा-शैली एवं पाश्चात्य काव्यशास्त्र

(v) हिंदी भाषा का क्रमिक विकास, हिंदी भाषा की बोलियाँ एवं उपबोलियाँ एवं उसकी विशेषताएँ एवं भाषा परिवार

(vi) अपठित बोध- अपठित गद्यांश / काव्यांश पर आधारित अर्थग्रहण, भाव-सौंदर्य, शिल्प-सौंदर्य सम्बंधी प्रश्न

व्याकरणिक प्रयोग परीक्षण

(i) वर्ण विचार -

- ❖ ध्वनियों का वर्गीकरण, वर्ण-वर्गीकरण, उच्चारण-स्थान
- ❖ वर्णमाला, वर्तनी, सन्धि/सन्धिविच्छेद

(ii) शब्द - विचार एवं शब्द भंडार

- ❖ शब्द भेद - उत्पत्ति, रचना, रूप और अर्थ की दृष्टि से शब्द
- ❖ शब्द भंडार-पर्यायवाची, विपरीतार्थक, एकार्थी, अनेकार्थी, श्रुतिसम भिन्नार्थक शब्द
- ❖ शब्द-युग्म शब्द निर्माण - उपसर्ग, प्रत्यय, समास

(iii) पद-विचार, पदबंध, पद-परिचय

- ❖ संज्ञा, सर्वनाम, विशेषण, विशेष्य (परिभाषा, भेद, लिंग, वचन, कारक)
- ❖ क्रिया (परिभाषा, भेद, अकर्मक, सकर्मक, काल, संरचना की दृष्टि से क्रिया भेद, वाच्य, वाच्य भेद, वाच्य परिवर्तन),
- ❖ अव्यय (परिभाषा, भेद- क्रिया विशेषण, संबंधबोधक, समुच्चयबोधक, विस्मयादिबोधक - निपात)
- ❖ पदबंध - भेद एवं प्रयोग
- ❖ पद-परिचय

(iv) वाक्य- विचार

- ❖ वाक्य संरचना, वाक्य भेद - अर्थ एवं रचना की दृष्टि से
- ❖ वाक्य - परिवर्तन, वाक्य-संश्लेषण, वाक्य विश्लेषण

❖ विराम चिह्न, लोकोक्ति एवं मुहावरे

प्रयोजनमूलक हिंदी कौशल परीक्षण

- ❖ पत्रकारिता एवं उसके विविध आयाम
- ❖ प्रिंटमाध्यम - समाचार, संपादकीय, रिपोर्ट, आलेख, फीचर, साक्षात्कार आदि के लिए लेखन,
- ❖ रेडियो व दूरदर्शन के लिए लेखन,
- ❖ विज्ञापन लेखन, उद् घोषणा, स्वागत भाषण, संगोष्ठी संचालन आदि
- ❖ कहानी का कविता में रूपान्तरण, कविता, कहानी, लघुकथा, डायरी लेखन आदि
- ❖ कार्यालयी हिन्दी, कार्यसूची, कार्यवृत्त, प्रतिवेदन, सरकारी पत्र, सूचनाएं, निविदाएं आदि

व्यावहारिक लेखन

- ❖ व्यावहारिक हिन्दी का स्वरूप
- ❖ प्रयोजनमूलक हिन्दी और उसके विविध आयाम

सर्जनात्मक लेखन एवं मौलिक अभिव्यक्ति

- ❖ दिए गए विषय पर कविता, लघुकथा एवं रचनात्मक लेख संबंधी मौलिक रचना
- ❖ कहानी का कविता में रूपान्तरण,
- ❖ अनुभवों के आधार पर लेखन
- ❖ वार्तालाप की दक्षता के विकास हेतु संवाद लेखन ।
- ❖ किसी भी समसामयिक विषय पर कहानी / कविता लेखन

REAL NUMBERS

- Review of representation of natural numbers, integers, and rational numbers on the number line. Rational numbers as recurring/ terminating decimals. Operations on real numbers.
- Examples of non-recurring/non-terminating decimals. Existence of non-rational numbers (irrational numbers) such as $\sqrt{2}$, $\sqrt{3}$, and their representation on the number line. Explaining that every real number is represented by a unique point on the number line and conversely, viz. every point on the number line represents a unique real number.
- Definition of nth root of a real number.
- Rationalization, real numbers of the type $\frac{1}{a+b\sqrt{x}}$ and $\frac{1}{\sqrt{x}+\sqrt{y}}$ their combinations where x and y are natural number and a and b are integers.
- Laws of exponents with integral powers. Rational exponents with positive real bases
- Fundamental Theorem of Arithmetic statements after reviewing work done earlier and after illustrating and motivating through examples, Proofs of irrationality of $\sqrt{2}, \sqrt{3}, \sqrt{5}$
- Number theory, sequences and patterns, Triangular Number, Hexagonal Number, square Numbers, Cube Numbers, patterns, Shape sequences, super cells, palindromic patterns. Kaprekar Constant .clock and Calender Number, collatz conjecture Bhramagupta's method of Computation.

POLYNOMIALS

- Definition of a polynomial in one variable, with examples and counter examples.
- Coefficients of a polynomial, terms of a polynomial and zero polynomial.
- Degree of a polynomial. Constant, linear, quadratic and cubic polynomials. Monomials, binomials, trinomials. Factors and multiples.
- Zeros of a polynomial. Relationship between zeros and coefficients of quadratic polynomials.
- Remainder Theorem with examples, Factor Theorem.
- Factorization of $ax^2 + bx + c$, $a \neq 0$ where a, b and c are real numbers, and of cubic polynomials using the Factor Theorem.
- The algebraic expressions and identities. Verification of identities:

$$(x + y + z)^2 = x^2 + y^2 + z^2 + 2xy + 2yz + 2zx$$

$$(x \pm y)^3 = x^3 \pm y^3 \pm 3xy(x \pm y)$$

$$x^3 \pm y^3 = (x \pm y)(x^2 \mp xy + y^2)$$

$$x^3 + y^3 + z^3 - 3xyz = (x + y + z)(x^2 + y^2 + z^2 - xy - yz - zx)$$

And their use in factorization of polynomials.

MATRICES

R, R², R³ as vector spaces over R and concept of Rⁿ. Standard basis for each of them. Linear Independence and examples of different bases. Subspaces of R², R³. Translation, Dilation, Rotation, Reflection in a point, line and plane. Matrix form of basic geometric transformations. Interpretation of eigen values and eigen vectors for such transformations and eigen spaces as invariant subspaces. Matrices in diagonal form. Reduction to diagonal form upto matrices of order 3. Computation of matrix inverses using elementary row operations. Rank of matrix, Solutions of a system of linear equations using matrices

LINEAR EQUATIONS IN TWO VARIABLES

Linear equations in one variable. Introduction to the equation in two variables. Focus on linear equations of the type $ax + by + c = 0$. Explain that a linear equation in two variables has infinitely many solutions and justify their being written as ordered pairs of real numbers, plotting them and showing that they lie on a line.

PAIR OF LINEAR EQUATIONS IN TWO VARIABLES

Pair of linear equations in two variables and graphical method of their solution, consistency/inconsistency. Algebraic conditions for number of solutions. Solution of a pair of linear equations in two variables algebraically - by substitution, by elimination. Simple situational problems.

QUADRATIC EQUATIONS

Standard form of a quadratic equation $ax^2 + bx + c = 0$, ($a \neq 0$). Solutions of quadratic equations (only real roots) by factorization, and by using quadratic formula. Relationship between discriminant and nature of roots.

ARITHMETIC PROGRESSIONS

Arithmetic Progression, n th term and sum of the first n terms of A.P. and their application in solving daily life problems.

COORDINATE GEOMETRY

The Cartesian plane, coordinates of a point, names and terms associated with the coordinate plane, notations. Graphs of linear equations. Distance formula. Section formula (internal division) Area of Triangle.

INTRODUCTION TO EUCLID'S GEOMETRY

History - Geometry in India and Euclid's geometry. Euclid's method of formalizing observed phenomenon into rigorous Mathematics with definitions, common/obvious notions, axioms/postulates and theorems. The five postulates of Euclid. Showing the relationship between axiom and theorem, for example: (Axiom) 1. Given two distinct points, there exists one and only one line through them. (Theorem) 2. (Prove) Two distinct lines cannot have more than one point in common.

LINES AND ANGLES

- If a ray stands on a line, then the sum of the two adjacent angles so formed is 180 degrees and the converse.
- If two lines intersect, vertically opposite angles are equal.
- Lines which are parallel to a given line are parallel.

TRIANGLES

- Two triangles are congruent if any two sides and the included angle of one triangle is equal to any two sides and the included angle of the other triangle (SAS Congruence).
- Two triangles are congruent if any two angles and the included side of one triangle is equal to any two angles and the included side of the other triangle (ASA Congruence).
- Two triangles are congruent if the three sides of one triangle are equal to three sides of the other triangle (SSS Congruence).
- Two right triangles are congruent if the hypotenuse and a side of one triangle are equal (respectively) to the hypotenuse and a side of the other triangle. (RHS Congruence)
- The angles opposite to equal sides of a triangle are equal.
- The sides opposite to equal angles of a triangle are equal.

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- If a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio.
 - If a line divides two sides of a triangle in the same ratio, the line is parallel to the third side.
 - If in two triangles, the corresponding angles are equal, their corresponding sides are proportional and the triangles are similar.
 - If the corresponding sides of two triangles are proportional, their corresponding angles are equal and the two triangles are similar.
 - If one angle of a triangle is equal to one angle of another triangle and the sides including these angles are proportional, the two triangles are similar.

QUADRILATERALS

- The diagonal divides a parallelogram into two congruent triangles.
- In a parallelogram opposite sides are equal, and conversely.
- In a parallelogram opposite angles are equal, and conversely.
- A quadrilateral is a parallelogram if a pair of its opposite sides is parallel and equal.
- In a parallelogram, the diagonals bisect each other and conversely.
- In a triangle, the line segment joining the mid points of any two sides is parallel to the third side and in half of it and (motivate) its converse.

CIRCLES

- Equal chords of a circle subtend equal angles at the center and (motivate) its converse.
- The perpendicular from the center of a circle to a chord bisects the chord and conversely, the line drawn through the center of a circle to bisect a chord is perpendicular to the chord.
- Equal chords of a circle (or of congruent circles) are equidistant from the center (or their respective centers) and conversely.
- The angle subtended by an arc at the center is double the angle subtended by it at any point on the remaining part of the circle.
- Angles in the same segment of a circle are equal.
- If a line segment joining two points subtends equal angle at two other points lying on the same side of the line containing the segment, the four points lie on a circle.
- The sum of either of the pair of the opposite angles of a cyclic quadrilateral is 180° and its converse.
- Tangent to a circle at, point of contact
- The tangent at any point of a circle is perpendicular to the radius through the point of contact.
- The lengths of tangents drawn from an external point to a circle are equal.

AREAS

Area of a triangle using Heron's formula, Area of sectors and segments of a circle. Problems based on areas and perimeter / circumference of the above said plane figures. (In calculating area of segment of a circle, problems should be restricted to central angle of 60° , 90° and 120°).

SURFACE AREAS AND VOLUMES

Surface areas and volumes of spheres (including hemispheres) and right circular cones. Surface areas and volumes of combinations of any two of the following: cubes, cuboids, spheres, hemispheres and right circular cylinders/cones. Area of a Triangle using Hero's formula and its application in finding the area of a quadrilateral.

STATISTICS

Bar graphs, histograms (with varying base lengths), and frequency polygons. Mean, median and mode of grouped and ungrouped data, infographics, presentation of data, tabular form.

PROBABILITY

Classical definition of probability. Simple problems on finding the probability of an event. elementary probability and basic law. Discrete and continuous random variable.

TRIGONOMETRY

Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence (well defined); motivate the ratios whichever are defined at 0° and 90° . Values of the trigonometric ratios of 30° , 45° and 60° . Relationships between the ratios.

TRIGONOMETRIC IDENTITIES

Proof and applications of the identity $\sin^2 A + \cos^2 A = 1$. Only simple identities to be given.

HEIGHTS AND DISTANCES:

Angle of elevation, Angle of Depression. Simple problems on heights and distances. Problems should not involve more than two right triangles. Angles of elevation / depression should be only 30° , 45° , and 60°

CALCULUS.

Sets. Functions and their graphs : polynomial, sine, cosine, exponential and logarithmic functions. Step function, Limits and continuity. Differentiation, Methods of differentiation like Chain rule, Product rule and Quotient rule. Second order derivatives of above functions. Integration as reverse process of differentiation. Integrals of the functions introduced above.

INEQUALITIES

Elementary Inequalities, Absolute value, Inequality of means, Cauchy – Schwarz Inequality, Tchebychef's Inequality.

Matter-Nature and Behaviour

Gases, liquids, solids, plasma and Bose-Einstein condensate, types of intermolecular forces. Classification of matter into mixtures and pure substances. Henry's Law. Concentration of solutions. Colloids-phases of colloids, Tyndall effect, Brownian movement. Suspension. Properties of matter. Measurement of properties of matter-S.I. system of units, physical and chemical changes. Laws of chemical combination. Gay Lussac's law, Avogadro law, atomic and molecular masses, average atomic mass, mole concept and molar masses, percentage composition.

Nature of matter:

Elements, compounds and mixtures. Heterogeneous and homogeneous mixtures, colloids and suspensions. Physical and chemical changes (excluding separating the components of a mixture).

Particle nature and their basic units:

Atoms and molecules, Law of Chemical Combination, Chemical formula of common compounds, Atomic and molecular masses.

Structure of atoms:

Electrons, protons and neutrons, Valency, Atomic Number and Mass Number, Isotopes and Isobars, Discharge tube experiments.

Chemical reactions:

Chemical equation, Balanced chemical equation, implications of a balanced chemical equation, types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation, endothermic exothermic reactions, oxidation and reduction.

Acids, bases and salts:

Their definitions in terms of furnishing of H^+ and OH^- ions, General properties examples and uses, neutralization, concept of pH scale Numericals, Importance of pH in everyday life; preparation and uses of Sodium Hydroxide, Bleaching powder, Baking soda, Washing soda and Plaster of Paris.

Metals and non metals:

Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds; Basic metallurgical processes; Corrosion and its prevention.

Carbon compounds:

Covalent bonding in carbon compounds. Versatile nature of carbon. Homologous series, difference between saturated hydrocarbons and unsaturated hydrocarbons. Chemical properties of carbon compounds. Alcohols: Preparation and properties. Qualitative analysis of alcohols, iodoform test, effect of alcohols on living beings. Carboxylic acids: Preparation and properties, soaps and detergents. Concept of hybridization and shapes of molecules structural formula and molecular models. isomerism, IUPAC nomenclature of organic compounds.

Periodic Classification of Elements

Mendeleev's periodic law, Periodic properties of elements, trends in the periods and groups: Importance of the periodic table, position of hydrogen in the periodic table.

Tissues, Organs, Organ System, Organism:

Structure and functions of animal and plant tissues (only four types of tissues in animals;

Meristematic and Permanent tissues in plants).

Life processes:

'Living Being'. Basic concept of nutrition, respiration, transport and excretion in plants and animals.

Control and co-ordination in animals and plants:

Tropic movements in plants; Introduction of plant hormones; Control and co-ordination in animals: Nervous system; Voluntary, involuntary and re-flexaction; Chemical co-ordination: animal hormones.

Reproduction:

Reproduction in animals and plants (asexual and sexual) reproductive health – need and methods of family planning . Safe sex vs HIV/AIDS. Child bearing and women's health.

Heredity and Evolution:

Heredity; Mendel's contribution-Laws for inheritance of traits: Sex determination: brief introduction evolution. - Acquired and inherited traits., Homologous and Analogous organs. , What are fossils?.

Cell - Basic Unit of life :

Cell as a basic unit of life; prokaryotic and eukaryotic cells, multi cellular organisms; cell membrane and cell wall, cell organelles and cell inclusions; chloroplast, mitochondria, vacuoles, endoplasmic reticulum, Golgi apparatus; nucleus, chromosomes – basic structure, number.

Motion:

Distance and displacement, velocity; uniform and non-uniform motion along a straight line; acceleration, distance-time and velocity-time graphs for uniform motion and uniformly accelerated motion, elementary idea of uniform circular motion.

Force and Newton's laws :

Force and Motion, Newton's Laws of Motion, Action and Reaction forces, Inertia of a body, Inertia and mass, Momentum, Force and Acceleration.

Gravitation:

Gravitation; Universal Law of Gravitation, Force of Gravitation of the earth (gravity), Acceleration due to Gravity; Mass and Weight; Freefall.

Floatation:

Thrust and Pressure. Archimedes' Principle; Buoyancy.

Work, Energy and Power:

Work done by a Force, Energy, power; Kinetic and Potential energy; Law of conservation of energy).

Sound:

Nature of sound and its propagation in various media, speed of sound, range of hearing in humans; ultra sound; reflection of sound; echo.

Effects of Current

Electric current, potential difference and electric current. Ohm's law; Resistance, Resistivity,

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Factors on which the resistance of a conductor depends. Series combination of resistors, parallel combination of resistors and its applications in daily life. Heating effect of electric current and its applications in daily life. Electric power, Interrelation between P, V, I and R.

Magnetic effects of current

Magnetic field, field lines, field due to a current carrying conductor, field due to current carrying coil or solenoid; Force on current carrying conductor, Fleming's Left Hand Rule, Electric Motor, Electromagnetic induction. Induced potential difference, Induced current, Fleming's Right Hand Rule, Electric Generator, Direct current. Alternating current: frequency of AC. Advantage of AC over DC. Domestic electric circuits.

Food Production

Plant and animal breeding and selection for quality improvement and management; Use of fertilizers and manures; Protection from pests and diseases; Organic farming.

Natural Phenomena

Reflection of light by curved surfaces; Images formed by spherical mirrors, centre of curvature, principal axis, principal focus, focal length, mirror formula (Derivation not required), magnification. Refraction; Laws of refraction, refractive index. Refraction of light by spherical lens; Image formed by spherical lenses; Lens formula (Derivation not required); Magnification. Power of a lens. Functioning of a lens in human eye, defects of vision and their corrections, applications of spherical mirrors and lenses. Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life

Our environment:

Eco-system, Environmental problems, Ozone depletion, waste production and their solutions. Biodegradable and non-biodegradable substances.

Global warming and green house effect, acid rain, particulate pollutants, smog, formation of photochemical smog.

Water pollution-oxygen demand, chemical oxygen demand, international standard of drinking water, processing of drinking water.

Diversity of living organisms

- Basis of Classification.
- Classification & Evolution.
- Hierarchy of classification-groups.
- Plantae, Animalia.
- Nomenclature

Why do we fall ill

- Health & its failure.
- Diseases and their causes
- Types of diseases- Infectious, Noninfectious.
- Prevention of diseases
- Smmunisation

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TIER II : Syllabus – TGT (Social Science)

Livelihoods, Economies and Societies:

I. Forest Society and Colonialism:

- Why Deforestation?
- The Rise of Commercial Forestry
- Rebellion in the Forest
- Forest Transformations in Java

II. Pastoralists in the Modern World:

- Pastoral Nomads and their Movements
- Colonial Rule and Pastoral Life
- Pastoralism in Africa

III . Indus Valley Civilisation (Ancient History)

the Cities of Harappa , Mohenjo Daro and Lothal as well as the art , town planning and agriculture of the civilizations.

IV. Muvender (Medivial History):- Cheras , Cholas nad Pandyas -Dynastics that ruled over South India during the Sangam Age ".Vijay Nagar : Founder , Dynastics , Capital and Administraion .

V. Revolution of 1857 (Modern India)

- Nawabs losing Power
- The Peasants and the Sepoys Responses to reforms
- Mutiny become as popular rebellion.

GEOGRAPHY

Motions of the Earth : Rotation , Revolution , Occurance of Day and night ; Change of seasons ; Latitudes and Longitudes ; Finding time .

Earth's Interior: Origin of Continents and Ocean basins Wegener's Continental drift Theory, Theory of plate Tectonics , Earthquakes and Volcanoes , Folding and Faulting .

1. India

- Location
- Size
- India and the World
- India's Neighbours

2. Physical Features of India:

- Major Physiographic Divisions–Himalayan Mountains, Northern Plains, Peninsular Plateau, Indian Desert, Coastal Plains, Islands

3. Drainage:

- Concept
- Drainage Systems in India
- The Himalayan Rivers-Ganga and Brahmaputra River System
- The Peninsular Rivers- Narmada Basin,Tapti Basin, Godavari Basin, Mahanadi Basin, Krishna Basin, Kaveri Basin
- Lakes
- Role of Rivers in the Economy
- River Pollution

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4. Climate:

- Concept
- Climatic Controls
- Factors influencing India's climate –Latitude, Altitude, Pressure and Winds (excluding Jet Streams and Western Cyclonic Disturbances and related figures)
- The Seasons –
Cold Weather Season, Hot Weather Season, Advancing Monsoon, Retreating/Post Monsoons
- Distribution of Rainfall
- Monsoon a unifying bond

5. Natural Vegetation and Wild Life:

- Types of Vegetation–Tropical Evergreen Forests, Tropical Deciduous Forests, Thorn Forests and Shrubs, Montane Forests, Mangrove Forests
- Wild Life

6. Population:

- Population Size and Distribution–India's Population Size and Distribution by Numbers, India's Population Distribution by Density
- Population Growth and Processes of Population Change–Population Growth, Processes of Population Change/Growth

Democratic Politics – I

1. What is Democracy? Why Democracy?

- What is Democracy?
- Features of Democracy
- Why Democracy?
- Broader Meanings of Democracy

2. Constitutional Design:

- Democratic Constitution in South Africa
- Why do we need a Constitution?
- Making of the Indian Constitution
- Guiding Values of the Indian Constitution

3. Electoral Politics:

- Why Elections?
- What is our System of Elections?
- What makes elections in India democratic?

4. Working of Institutions:

- How is the major policy decision taken?
- Parliament
- Political Executive
- The Judiciary

5. Democratic Rights:

- Life without Rights
- Rights in a Democracy
- Rights in the Indian Constitution
- Expanding scope of rights

Economics

1. People as Resource:

- Overview
- Economic Activities by Men and Women
- Quality of Population
- Unemployment

2. Poverty as a Challenge:

- Overview
- Two typical cases of Poverty
- Poverty as seen by Social Scientists
- Poverty Estimates
- Vulnerable Groups
- Interstate Disparities
- Global Poverty Scenario
- Causes of Poverty
- Anti-Poverty measures
- The Challenges Ahead

3. Food Security in India:

- Overview
- What is Food Security?
- Why Food Security?
- Who are food insecure?
- Food Security in India
- What is Buffer Stock?
- What is the Public Distribution System?
- Current Status of Public Distribution System
- Role of Cooperatives in food security

India and the Contemporary World – II

Events and Processes:

1. The Rise of Nationalism in Europe:

- The French Revolution and the Idea of the Nation
- The Making of Nationalism in Europe
- The Age of Revolutions: 1830-1848
- The Making of Germany and Italy
- Visualizing the Nation
- Nationalism and Imperialism

2. Nationalism in India:

- The First World War, Khilafat and Non -
- Cooperation
- Differing Strands within the Movement
- Towards Civil Disobedience
- The Sense of Collective Belonging

Livelihoods, Economies and Societies:

3. The Making of a Global World:

- The Pre-modern world
- The Nineteenth Century (1815-1914)
- The Inter war Economy
- Rebuilding a World Economy: The Post-War Era

4. The Age of Industrialization:

- Before the Industrial Revolution
- Hand Labour and Steam Power
- Industrialization in the Colonies
- Factories Come Up
- The Peculiarities of Industrial Growth
- Market for Goods

Everyday Life, Culture and Politics:

5. Print Culture and the Modern World:

- The First Printed Books
- Print Comes to Europe
- The Print Revolution and its Impact
- The Reading Mania
- The Nineteenth Century
- India and the World of Print
- Religious Reform and Public Debates
- New Forms of Publication
- Print and Censorship

Contemporary India – II

1. Resources and Development:

- Concept
- Development of Resources
- Resource Planning – Resource Planning in India, Conservation of Resources
- Land Resources
- Land Utilization
- Land Use Pattern in India
- Land Degradation and Conservation Measures
- Soil as a Resource - Classification of Soils, Soil Erosion and Soil Conservation

2. Forest and Wildlife

- Conservation of forest and wildlife in India
- Types and distribution of forests and wildlife resources
- Community and Conservation

3. Water Resources:

- Water Scarcity and The Need for Water Conservation and Management
- Multi-Purpose River Projects and Integrated Water Resources Management
- Rainwater Harvesting

4. Agriculture:

- Types of Farming – Primitive Subsistence, Intensive Subsistence,
- Commercial
- Cropping Pattern – Major Crops, Food Crops other than Grains, Non Food Crops, Technological and Institutional Reforms
- Food Security (excluding impact of globalization on agriculture)

5. Minerals and Energy Resources

- What is a mineral?
- Mode of occurrence of Minerals – Where are these minerals found?, Ferrous Minerals, Non-Ferrous Minerals, Non-Metallic Minerals, Rock Minerals
- Conservation of Minerals
- Energy Resources – Conventional Sources of Energy, Non-Conventional Sources of Energy
- Conservation of Energy Resources

6. Manufacturing Industries:

- Importance of Manufacturing – Industrial Location (excluding Industry Market Linkage), Agro based Industry (excluding Cotton Textiles, Jute Textiles, Sugar Industry), Mineral based Industries (excluding Iron Steel Industry, Cement Industry), Industrial Pollution and Environmental Degradation, Control of Environmental Degradation

7. Life Lines of National Economy:

- Roadways
- Railways
- Pipelines
- Waterways
- Major Seaports
- Airways
- Communication
- International Trade
- Tourism as a Trade

Democratic Politics – II**1. Power Sharing:**

- Belgium and Sri Lanka
- Majoritarianism in Sri Lanka
- Accommodation in Belgium
- Why power sharing is desirable?
- Forms of Power Sharing

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2. Federalism:

- What is Federalism?
- What make India a Federal Country?
- How is Federalism practiced?
- Decentralization in India

3. Gender, Religion and Caste:

- Gender and Politics - Public/Private division, Women's political representation
- Religion, Communalism and Politics –Communalism, Secular State
- Caste and Politics - Caste inequalities, Caste in politics, Politics in caste

4. Political Parties:

- Why do we need Political Parties? –
- Meaning, Functions, Necessity
- How many parties should we have?
- National Parties
- State Parties
- Challenges to Political Parties
- How can Parties be reformed?

5. Outcomes of Democracy:

- How do we assess democracy's outcomes?
- Accountable, responsive and legitimate government
- Economic growth and development
- Reduction of inequality and poverty
- Accommodation of social diversity
- Dignity and freedom of the citizens

Understanding Economic Development

1. Development:

- What Development Promises – Different People, Different Goals
- Income and Other Goals
- National Development
- How to compare different countries or states?
- Income and other criteria
- Public Facilities
- Sustainability of Development

2. Sectors of the Indian Economy:

- Sectors of Economic Activities
- Comparing the three sectors
- Primary, Secondary and Tertiary Sectors in India
- Division of sectors as organized and unorganized
- Sectors in terms of ownership: Public and Private Sectors

3. Money and Credit:

- Money as a medium of exchange
- Modern forms of Money
- Loan activities of Banks
- Two different Credit situations
- Terms of Credit
- Formal Sector Credit in India

- Self Help Groups for the Poor

4. Globalization and the Indian Economy:

- Production across countries
- Inter linking production across countries
- Foreign Trade and integration of markets
- What is Globalization?
- Factors that have enabled Globalization
- World Trade Organization
- Impact of Globalization in India
- The Struggle for a fair Globalization

5. Consumer Rights

- Consumer in market place
- Consumer movement
- Consumer Rights

TIER II : SYLLABUS FOR TGT (ENGLISH)

Section A: Reading

Comprehension

Three or four unseen passages from different genres (prose, poetry, drama, articles, editorials, scientific, and literary extracts).

Questions will test comprehension, inference, vocabulary, tone, rhetorical devices, and logical sequencing.

Section B: Writing Ability

B1. Functional Writing:

Formal and Informal Letters: Business letters, job applications, letters to editors, complaints, and personal letters.

Report Writing: Factual description of events, newspaper reports, and analytical reports. Notices, Circulars, and Press Releases.

B2. Creative and Analytical Writing:

Essay Writing: Argumentative, analytical, reflective, and descriptive essays.

Article/Debate/Speech: Expressing opinions on socio-political, economic, and educational issues.

Section C: Grammar and Usage

Parts of Speech: Nouns, Pronouns, Verbs, Adverbs, Adjectives, Prepositions, Conjunctions. Sentence Structure : Types of sentences, subject-verb agreement, parallelism, and sentence connectors.

Tenses and Their Usage: Active-passive voice, sequence of tenses, and reported speech. Clauses: Noun, adjective, and adverb clauses.

Common Errors: Articles, prepositions, modifiers, redundancy, and word order. Editing and Proofreading: Error detection, sentence correction, and transformation.

Section D: Literature

D1. British Literature:

Elizabethan and Jacobean Drama: William Shakespeare, Christopher Marlowe, Ben Jonson. Poetry: John Donne, Alexander Pope, William Wordsworth, Samuel Taylor Coleridge, John Keats.

Victorian and Modern Writers: Charles Dickens, Thomas Hardy, Virginia Woolf, T.S. Eliot, George Orwell.

D2. Indian Writing in English:

R.K. Narayan, Mulk Raj Anand, Anita Desai, Vikram Seth, Arundhati Roy, Amitav Ghosh.

D3. World Literature:

Gabriel García Márquez, Chinua Achebe, Pablo Neruda, Khaled Hosseini.

TIER II : प्रशिक्षित स्नातक शिक्षक (हिन्दी)

स्नातक स्तर पर पढ़े पाठ्यक्रम के अवधारणाओं, अनुप्रयोगों की गहन समझ का आकलन किया जाएगा ।

गद्य-खंड :

हिंदी साहित्य का इतिहास

हिंदी साहित्य उद्भव और विकास

गद्य साहित्य की विधाएं

कहानी, उपन्यास, नाटक/एकांकी, निबंध, रेखाचित्र, संस्मरण, जीवनी, आत्मकथा, यात्रा वृत्तांत, रिपोर्ताज, कथेतर गद्य

काव्य-खंड:

आदिकालीन कविता

भक्तिकाल (सगुण, निर्गुण, सूफी काव्य)

रीतिकाल की कविता

आधुनिक काल की कविता (भारतेन्दु युग, द्विवेदी युग, छायावाद, प्रगतिवाद, प्रयोगवाद, नई कविता, समकालीन कविता)

हिंदी भाषा का विकास एवं व्याकरण :-

हिंदी की उप-भाषाएं एवं बोलियां

वर्ण विचार (उच्चारण, वर्तनी)

शब्द विचार और शब्द रचना (विलोम शब्द पर्यायवाची, अनेकार्थक, श्रुतिसम भिन्नार्थक शब्द इत्यादि)

संधि, समास

विकारी शब्द, अविकारी शब्द

वाक्य रचना: (अर्थ एवं रचना के आधार पर)

पद - परिचय

अलंकार शब्दालंकार, अर्थालंकार (अनुप्रास, यमक, श्लेष, उपमा, रूपक, उत्प्रेक्षा, मानवीकरण, अतिशयोक्ति अलंकार)

शब्द-शक्तियां

मुहावरे एवं लोकोक्तियां

अपठित गद्यांश, पद्यांश

संविधान में हिंदी की स्थिति संबंधी धाराएं, उप धाराएं

हिंदी राजभाषा, संपर्क भाषा, प्रयोजन मूलक हिंदी, कार्यालयी हिंदी, मानक हिंदी

ई मेल लेखन, लघु कथा लेखन, विज्ञापन लेखन इत्यादि लेखन ।



TIER II : टीजीटी संस्कृत निर्धारित पाठ्यक्रम

भाग - क - व्याकरण
भाग- ख - वाक्यरचना
भाग- ग - काव्यांश
भाग- घ - गद्यांश

भाग- क - व्याकरण

शब्दरूप - राम, मति, नदी, हरि, गुरु, वधू, मधु, पितृ, मातृ, वारि, गो, भगवत्, जगत् आत्मन्, पथिन्, विद्वस्, सर्व, किम्,

तत्, एतत्, इदम्, अस्मद्, युष्मद्

धातुरूप - पठ्, पच, भू, कृ, अस्, अद्, हन्, दिव्, तन्, तुद्, रुध्, क्री, चुर्, सेव्, लभ्,

(लट्, लङ्, लृट्, लोट् और विधिलिङ् लकारों में)

कारक - परिचय - षड् कारकाणि, सभी विभक्तियाँ

प्रमुख प्रत्ययः - क्त्वा, तुमुन्, ल्यप्, शतृ, शानच् क्त, क्तवतु, अनीयर्, तव्यत्, तव्य, त्व, तल, ठक्, मतुप्, टाप्, डीप्

अव्यय - उच्चैः, च, श्वः, ह्यः, अध, अत्र, तत्र, यत्र, कुत्र, इदानीम्, अधुना, सम्प्रति, साम्प्रतम्, यदा, तदा,

कदा, सहसा, वृथा, शनैः, अपि, कुतः, इतस्ततः, यदि, तर्हि, यावत्-तावत् ।

सन्धि - स्वर - दीर्घ, गुण, वृद्धि, यण, अयादि

व्यञ्जन - जशत्व, अनुस्वार, परसवर्ण

विसर्ग - उत्त्व, रत्व, सत्व, विसर्ग लोप, विसर्ग के स्थान पर स्, ष, श्

समास - अव्ययीभाव, तत्पुरुष, कर्मधारय, द्विगु, नञ्-तत्पुरुष, बहुव्रीहि, द्वन्द्व ।

उपसर्गः - द्वाविंशतिः (22)

संख्या - शतम् यावत् (सौ तक)

भाग- ख - वाक्यरचना

भाग - क में निर्धारित व्याकरण बिन्दुओं के प्रयोग पर आधारित शुद्ध-अशुद्ध-निर्णय ।

अपठित-अवबोधन

अपठित अनुच्छेदों का अवबोधन - अनुवाद एवं प्रश्नोत्तर

लघु संस्कृत निबन्ध - संस्कृत भाषा, साहित्य और संस्कृति से सम्बन्धित

भाग- ग - काव्यांश

रघुवंशमहाकाव्यम् - प्रथम सर्ग - 1-25 श्लोक

अभिज्ञान शाकुन्तलम् - चतुर्थ अंकः

प्रतिमा नाटकम् - तृतीय अंकः

नीतिशतकम् - सम्पूर्ण

भगवद्गीता - द्वितीय-अध्यायः

भाग- घ - गद्यांश

1

शुकनासोपदेशः - प्रारम्भ से लक्ष्मीवर्णन के प्रसंग 'स्वल्पसत्त्वमुन्मतीकरोति' (बाणभट्टकृत कादम्बरी के अन्तर्गत)

शिवराजविजयः - प्रथम - निःश्वास

कवि परिचय - कालिदास, भास, भवभूति, माघ, शूद्रक, भारवि, श्रीहर्ष, भर्तृहरि

संस्कृत सुभाषित - सूक्तियों का ज्ञान, प्रसिद्ध कथन

छन्द - अनुष्टुप, उपजाति, वंशस्थ, वसन्ततिलका, मालिनी, सगंधरा एवं शार्दूलविक्रीडित

अलंकार - अनुप्रास, उपमा, रूपक, उत्प्रेक्षा, यमक, श्लेष एवं अर्थान्तरन्यास

वैदिक साहित्य - चारों वेदों का सामान्य परिचय, ईशावास्योपनिषद्, तैत्तिरीय उपनिषद्

TIER II Syllabus – PRT

Comprehension

Three or four unseen passages from different genres (prose, poetry, drama, articles, editorials, scientific, and literary extracts).

Questions will test comprehension, inference, vocabulary, tone, rhetorical devices, and logical sequencing.

Writing Ability

Functional Writing:

Formal and Informal Letters: Business letters, job applications, letters to editors, complaints, and personal letters.

Report Writing: Factual description of events, newspaper reports, and analytical reports. Notices, Circulars, and Press Releases.

Grammar and Usage

Parts of Speech: Nouns, Pronouns, Verbs, Adverbs, Adjectives, Prepositions, Conjunctions.

Sentence Structure : Types of sentences, subject-verb agreement, parallelism, and sentence connectors.

Tenses and Their Usage: Active-passive voice, sequence of tenses, and reported speech. Clauses: Noun, adjective, and adverb clauses.

Common Errors: Articles, prepositions, modifiers, redundancy, and word order. Editing and Proofreading: Error detection, sentence correction, and transformation.

1- हिन्दी साहित्य का इतिहास 2- गद्य साहित्य की विधाएँ कहानी, निबन्ध, जीवनी, आत्मकथा, रिपोर्ट। 3- अपठित गद्यांश, पद्यांश। 4- प्रसिद्ध मुहावरे और लोकोक्तियाँ

व्याकरण: संज्ञा, विशेषण, वचन और व्यावहारिक प्रयोग, गणित के पाठ्यक्रम, पाठ्यक्रम के अनुरूप हिन्दी में संख्याएँ, संयुक्त अक्षर की पहचान, पर्याय और विलोम (स्तरानुकूल), सर्वनाम और लिंग की पहचान, विशेषण का संज्ञा के साथ सुसंगत प्रयोग, वचन वचन का प्रयोग, क्रिया, काल और कारक चिन्हों की पहचान, शब्दों के संदर्भ में लिंग का प्रयोग, संधि, संधि विच्छेद, पर्यायवाची शब्द

Geometry: Shapes & Spatial Understanding, Solids around us.

Numbers: Developing a Sense of Numbers, Counting and Operations of Numbers, Addition and Subtraction, Multiplication, Division, Mental Arithmetic, Fractional Numbers, Money, Measurement and units, Length, Weight, Capacity (Volume), Time, Patterns, LCM, HCF, Mensuration, Area & Volume, Perimeter, Distance time & Speed, Profit & Loss, Percentage & Ratio, Average, Lines and angles, Circle, Triangles, Statics/Data Handling

Family, Friends and Communities, Natural Resources, Understanding the Environment and Environmental Impact, Life Around Us, Gifts of Nature. Food, Shelter, Water, Travel, Things we make and do. Physiological processes in Plants, Animals and Human Being. Weather, Climate, Landforms of India, Cultural Heritage and Traditions, Governance and Democracy, Constitution of India, Indus valley Civilization, Gupta Era, Resources of India, Magnets, Materials, Methods of separation.

Visual Art: Objects and Still life art, Colours, Paper Crafts, Seals and Prints, Local art forms of state.

Yoga, Physical and motor fitness, Diet and Health, First Aid and Safety, Ethics in Sports, Fundamental skill of games- Badminton, Football, Kabaddi, Handball, Kho Kho, cricket, Hockey. Local games of various states.

Syllabus for written examination for post of PGT(Physical Education)

Unit - I

- Definition, aim and objectives of Physical Education, Health education and Recreation.
- Philosophies of Education as applied to Physical Education – Idealism, Naturalism, Realism, Pragmatism, Existentialism and Humanism.
- Biological basis of physical activity – benefits of exercise, growth and exercise, exercise, and well – being sex and age characteristics of adolescent, body types.
- Psychological basis of Physical Education – Play and Play theories, general principles of growth and development, Principles of motor – skill acquisition, transfer of training effects.
- Sociological basis of Physical Education – socialization process, social nature of men and physical activity, sports as cultural heritage of mankind, customs, traditions and sport, competition and cooperation.
- Physical Education in ancient Greece, Rome and Contemporary Germany, Sweden, Denmark and Russia.
- Olympic Movement – Historical development of Ancient and Modern Olympic Games.
- Physical Education in India.

Unit - II

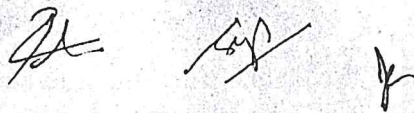
- Physiology of Muscular activity, Neurotransmission and Movement mechanism.
- Physiology of respiration.
- Physiology of blood circulation.
- Factors influencing performance in sports.
- Bioenergetics and recovery process.
- Athletic injuries – their management and rehabilitation.
- Therapeutic modalities.
- Ergogenic aids and doping

Unit - III

- Joints and their movements – planes and axes.
- Kinetics, Kinematics – linear and angular, levers.
- Laws of motion, principles of equilibrium and force, spin and elasticity.
- Posture, Postural deformities and their correction.
- Muscular analysis of Motor movement.
- Mechanical analysis of various sports activities.
- Mechanical analysis of fundamental movements – (running, jumping, throwing, pulling and pushing).
- Massage manipulation and therapeutic exercises.

Unit - IV

- Learning process – theories and laws of learning.
- Motivation, theories and dynamics of motivation in sports.
- Psychological factors affecting sports performance – viz., stress, anxiety, tension and aggression.
- Personality, its dimensions, theories, personality and performance.
- Individual differences and their impact on skill learning and performance.
- Group dynamics, team cohesion and leadership in sports.
- Sociometrics, economics and politics in sports.
- Media and sports.



Unit – V

- Development of teacher education in Physical Education.
- Professional courses in Sports and Physical Education in India.
- Professional Ethics.
- Qualities and Qualifications of Physical Educational Personnel.
- Principles of curriculum planning.
- Course content for academic and professional courses.
- Age characteristics of pupils and selection of activities.
- Construction of class and school Physical Education time table.

Unit – VI

- Health – Guiding principles of health and health education.
- Nutrition and dietary manipulations.
- Health – related fitness, obesity and its management.
- Environmental and occupational hazards and first aid.
- Communicable diseases – their preventive and therapeutic aspect.
- School health program and personal hygiene.
- Theories and principles of recreation.
- Recreation program for various categories of people.

Unit – VII

- Characteristics and principles of sports training.
- Training load and periodization.
- Training methods and specific training programme for development of various motor qualities.
- Technical and Tactical preparation for sports.
- Short-term and long – term training plans.
- Sports talent identification – process and procedures.
- Preparing for competition – (build up competitions, main competition, competition frequency, psychological preparation).
- Rules of Games and Sports and their interpretations.

Unit – VIII

- Nature, scope and type of research.
- Formulation and selection of research problem.
- Sampling – process and techniques.
- Methods of research.
- Data collection – tools and techniques.
- Statistical techniques of data analysis – measures of central tendency and variability, correlation, normal probability curve, t – test and f – tests, chi – square, z – test.
- Hypothesis – formulation, types and testing.
- Writing research report.

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Unit – IX

- Concept of Test, measurement and evaluation.
- Principles of measurement and evaluation
- Construction and classification of Tests.
- Criteria of test evaluation.
- Concepts and assessment of physical fitness, motor fitness, motor ability and motoreducability.
- Skill test for Badminton, Basket ball, Hockey, Lawn – tennis, Soccer, Volley ball.
- Testing psychological variables – competitive anxiety, aggression, team cohesion, motivation, self – concept.
- Anthropometric measurements and body composition.

Unit – X

- Concept and principles of management.
- Organization and functions of sports bodies.
- Intramurals and Extramurals.
- Management of infrastructure, equipments, finance and personnel.
- Methods and Techniques of teaching.
- Principles of planning Physical Education lessons.
- Pupil – teacher interaction and relationship.
- Concept of techniques of supervision.

Unit – XI

- Games/Sports Rules, Regulations & Interpretation.
- General Knowledge & Current affairs related to games, sports.

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Banaras Hindu University

PGT-Psychology

Syllabus

Unit 1 General Psychology; Experimental Method and Testing

Meaning, Definition, Scope of Psychology, Methods of study in Psychology, Individual Differences, Experimental methods in Psychology, Steps involved in experimentation; Problem, hypothesis and Variables; Types and control of variables. Experimental design: Meaning and purpose; Single group design - Pre- and post-measurements. Between subjects designs - Randomized, matched groups and factorial designs. Overview of psychological test. Administration, scoring and interpretation of tests. Basic psychometric concepts; Test construction and item analysis. Reliability and validity: Meaning and types. Norms. Assessment of ability and aptitude: Basic concept and theories. Tests of intelligence and aptitude: Stanford Binet (4th ed.), and Wechsler Intelligence scales; differential aptitude test.

Unit 2 Biological Bases of Behaviour

The Central and Peripheral Nervous Systems – Structure and functions. Muscular and Glandular system: Types and functions. Biological basis of Motivation: Hunger, Thirst, Sleep and Sex. Biological basis of emotion: The Limbic system, Hormonal regulation of behaviour. Basic motivational concepts: Instincts, Needs, Drives, Arousal, Incentives, Motivational Cycle. Theories of motivation. Emotions: Physiological correlates. Theories of emotions: James-Lange, Canon-Bard, Schachter and Singer, Lazarus, and Lindsley.

Unit 3 Sensation, Perception and Attention

Sensory systems: General and specific sensations, receptors and processes. Perception: Approaches to the Study of Perception: Gestalt and physiological approaches. Perceptual Organization: Gestalt, Figure and Ground, Law of Organization. Perceptual Constancy: Size, Shape, and Colour. Illusions. Perception of Form, Depth and Movement. Attention: Forms of attention, Models of attention.

Unit 4 Learning, Memory and Forgetting

Classical Conditioning: Procedure, phenomena and related issues. Instrumental learning: Phenomena, Paradigms and theoretical issues; Reinforcement: Basic variables and schedules; Behaviour modification and its applications. Memory processes: Encoding, Storage and Retrieval. Stages of memory: Sensory memory, Short-term memory (Working memory), Long-term Memory (Declarative – Episodic and Semantic; Procedural). Theories of Forgetting: Interference, Retrieval Failure, Decay, Motivated forgetting.

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Unit 5 Thinking, Problem Solving and Creativity

Concept formation: Rules, Types, and Strategies; Role of concepts in thinking. Types of Reasoning. Problem solving: Type, Strategies, and Obstacles. Decision-making: Types and models. Creativity: Torrance, Getzel & Jackson; Guilford, Wallach & Kogan. Relationship between Intelligence and Creativity.

Unit 6 Personality,

Determinants of personality: Biological and socio-cultural. Approaches to the study of personality: Psychoanalytical, Neo-Freudian, Social learning, Trait and Type, Cognitive, Humanistic, Existential, Transpersonal psychology.

Unit 7 Social and Developmental Psychology

Group and Social influence (Social Facilitation; Social loafing); Social influence (Conformity, Peer Pressure, Persuasion, Compliance, Obedience, Social Power, Reactance. Aggression. Group dynamics, leadership style and effectiveness. Personal space, crowding, and territoriality. Developmental processes: Nature, Principles, Factors in development, Stages of Development. Successful aging. Various aspects of development: Sensory-motor, cognitive, language, emotional, social and moral.

Unit 8 Applications of Psychology in Educational, Settings

Applications of theories of motivation and learning in School. Factors in educational achievement. Teacher effectiveness. Guidance in schools: Needs, organizational setup and techniques. Counselling: Process, skills, and techniques. The role of the psychologist in industry, the field of occupational psychology: Applications of psychological principles in the motivation, job analysis, selection, placement, training and counselling at workplace.

Unit 9 Application of Psychology in Clinical Settings

Psychopathology: Concept, Mental Status Examination, Classification, Causes. Psychotherapies: Psychoanalysis, Person-centered, Gestalt, Existential, Behaviour therapy, REBT, CBT, MBCT, Transactional Analysis, Family therapy.

Unit 10 Stress & Coping

Stress and Coping: Concept, Models, Type A, B, C, D behaviours, Stress management strategies such as Biofeedback, Music therapy, Breathing exercises, Progressive Muscular Relaxation, Guided Imagery, Mindfulness, Meditation, Yoga, Stress Inoculation Training.

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Banaras Hindu University

दर्शन-विषय
सांख्य-दर्शन

1. सत्कार्यवाद
2. साख्याभिमत-प्रमाण
3. सृष्टिसंहार-प्रक्रिया
4. बुद्धिसर्ग
5. मोक्षस्वरूप
6. व्यक्ताव्यक्तज्ञस्वरूप

मीमांसा-दर्शन

1. अंशत्रयवती भावना-विचार
2. विधि-विचार
3. श्रुतिप्राबल्य-विचार
4. क्रमस्वरूप तथा प्रमाण
5. प्रकरणप्राबल्य-विचार
6. नामत्व-विचार

वेदान्त-दर्शन

1. अनुबन्धचतुष्टय-विचार
2. अध्यारोपापवाद-विचार
3. सृष्टिसंहार-प्रक्रिया
4. वेदान्ताभिमत-मोक्षस्वरूपविचार
5. अज्ञान-विचार
6. कोश-विचार
7. पंचीकरण-प्रक्रिया

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योगदर्शन

1. योगलक्षण—विचार
2. समाधि—विचार
3. कैवल्योपाय—विचार
4. अष्टांग—विचार
5. सिद्ध्युपाय—विचार
6. चित्तशुद्धि—विचार

न्यायदर्शन

1. षोडशपदार्थ—विचार
2. प्रत्यक्ष—विचार
3. कारण—विचार
4. अनुमान—विचार
5. हेत्वाभास—विचार
6. शाब्दबोध—विचार
7. मोक्ष—विचार

22. 4/12/12

Syllabus for the post of Asst. Teacher (TGT- Home Science)	
Unit	Topics
1. Concept and scope of Home Science Education and recent trends	- o Concept of Home Science - o Fields of Home Science - o Relevance of study of Home Science and career options - o Recent trends
2. Food and Nutrition	- o Concept of nutrition - o Diet - Composition and functions - o Balanced diet - o Dietary groups and their food sources - o Nutrition - o Malnutrition - o Food preparation - o Food preservation - o Food adulteration - o Food Safety standards (National & International Organisations) - o Diseases and food for patients - o Human anatomy - o Food intake, digestion, absorption, metabolism, etc.
3. Family Resource Management	- o Home management - concept, definition - o Family resources - o Family budget - o Time, energy, and money management - target value and patterns - o Family needs - o Work simplification - o Savings - o Interior and exterior decoration, etc.
4. Health & Environment	- o Health - concept, definition - o Personal health and hygiene - o Government and Non-Government institutions in healthcare - o Importance of environment for health - o Environmental pollution-Types and its impact on human health - o Airborne and waterborne diseases, First aid, etc. - o Environment-concept & definition- - o Renewable and non- renewable energy - o Concept of 3 Rs.
5. Human Development	- o Concept of growth and development - o Study of all developmental patterns in different age groups: • Infancy • Baby hood • Pre-school child

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विभागाध्यक्षा / HEAD
गृहविज्ञान विभाग / Department of Home Science
महिला महाविद्यालय / Mahila Mahavidyalaya
काशी / Varanasi
बाराणसी / Varanasi

	• School going child • Child in puberty • Adolescents • Adult • Old age person ○ Infant mortality and illness ○ Adolescent health ○ Marriage and family ○ Family values
6. Clothing & Textiles	○ Fabric and stitched clothes ○ Classification of fibres and their chemistry ○ Garment designing ○ Dyeing and washing of fabrics ○ Selection of fabrics and outfits according to occasion/season, and their making ○ Traditional Embroideries
7. Extension Education and Communication	○ Home Science - meaning, definition, scope, subject matter, history and relation with other disciplines ○ Need of extension education ○ Means of disseminating subject matter and philosophy ○ Community development ○ Basic concept of Developmental Communication ○ Method of communication in development ○ Media in development of communication

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गृहविज्ञान विभाग/Department of Home Science
महिला महाविद्यालय/Mahila Mahavidyalaya
काशी/Varanasi

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Syllabus for TGT-URDU

Section A

Nasr (Prose)

1. Urdu Zaban-o-Adab Ka Aaghaz-o-Irteqa
2. Urdu Zaban Ke Aaghaz Ke Hawale Se Mukhtalif Nazariyat
3. Urdu Mein Dastan Nigari: Fun Aur Aaghaz-o-Irteqa
(i) Bagh-o-Bahar (ii) Rani Ketki Ki Kahani Ka Tanqidi Mutala
4. Urdu Mein Novel Nigari Ka Aaghaz-o-Irteqa
(A) Urdu Ke Aham Novel Nigar Aur Unke Navelon Ka Tanqidi Mutala
(i) Nazeer Ahmad (ii) Abdul Halim Sharar (iii) Mirza Hadi Ruswa
(iv) Premchand (v) Qurrat-ul-Ain Haider (vi) Ismat Chughtai
5. Urdu Mein Afsana Nigari Ka Aaghaz-o-Irteqa
(A) Urdu Ke Aham Afsana Nigar Aur Unki Afsana Nigari Ka Tanqidi Mutala
(i) Premchand (ii) Muntoo (iii) Rajinder Singh Bedi (iv) Krishna Chander
(v) Qurrat-ul-Ain Haider (vi) Ismat Chughtai
6. Urdu Mein Drama Nigari Ki Riwayat
(A) Urdu Ke Aham Drama Nigar Aur Unki Drama Nigari Ki Khususiyat
(i) Agha Hashr Kashmiri (ii) Imtityaz Ali Taj (iii) Mohd. Hasan
7. Urdu Ki Ghair Afsanvi Nasri Asnaf Ka Mutala
(A) Urdu Mein Inshaiya Nigari Ki Riwayat Aur Urdu Ke Ahma Inshaiya Nigar
(i) Khawaja Hasan Nizami (ii) Rashid Ahmad Siddiqui
(B) Urdu Mein Mazmoon Nigari Ki Riwayat Aur Ahmiyat

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(C) Urdu Mein Tanz-o-Mizah Ki Riwayat Aur Urdu Ke Aham Tanz-o-Mizah Nigar

(i) Petras Bukhari (ii) Kanhaiya Lal Kapoor

(D) Urdu Mein Khaka Nigari Ki Riwayat Aur Urdu Ke Aham khaka Nigar

(i) Maulvi Abdul Haq (ii) Farhatullah Baig

(E) Urdu Mein Sawaneh Nigari Ki Riwayat Aur Urdu Ke Aham Sawaneh Nigar

(i) Altaf Hussain Hai (ii) Shibli Numani

(F) Urdu Mien Khud Nawisht Ki Riwayat

(G) Urdu Mein Safar Nama Nigari Ka Aaghaz-o- Irteqa

(H) Urdu Mein Riportaz Nigari Ki Ahmiyat

Section-B

Shairi (Poetry)

Urdu Ki Aham Sheiri Asnaf Ka Tanqidi Mutala
(Qaseeda, Masnavi, Marsiya, Ghazal, Nazm Nigari)

1. Urdu Mein Qaseeda Nigari Ka Aaghaz-o-Irteqa

(i) Mirza mohd. rafi Sauda (ii) Sheikh Ibrahim Zaiq

2. Urdu Mein Masnavi Nigari Ka Aagaz-o- Irteqa Aur Urdu Ki Aham Masnaviyon Ka Tanqidi Mutala

(i) Sehr-ul-Bayan (ii) Gulzar-e-Nasim

3. Urdu Mein Marsiya Nigari Ka Aaghaz-o-Irteqa Aur Urdu ke Aham Marsiya Nigar

(i) Mirza Anees (ii) Mirza Dabeer

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4. Urdu Mein Ghazal Ka Aagaz-o-Irteqa Aur Urdu Ke Aham Ghazal Go Shaura
 - (i) Quli Qutab Shah (ii) Wali Aurangabadi (iii) Meer (iv) Dard (v) Ghalib
 - (vi) Zauq (vii) Momin (viii) Shaad (ix) Iqbal (x) Hasrat Mohani
 - (xi) Firaq Gorakhpuri (xii) Jigar Muradabadi (xiii) Asghar Gondvi
5. Urdu Mein Nazm Nigari Ki Riwayat Aur Urdu Ke Aham nazm Nigar Shaura
 - (i) Nazeer Akbarabadi (ii) Altaf Hussain Hali (iii) Akbar Allahabadi
 - (iv) Allama Iqbal (v) Faiz (v) Josh (vi) Akhtar-ul-Iman

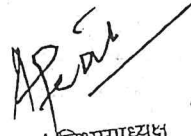
Section-C

1. Urdu Ke Mukhtalif Tanqeedi Dabistan Aur Aham Naqadeen
2. Urdu Ki Mukhtalif Tahreekat-o-Rujhanat

Section-D

Qawaid (Grammar)

- (i) Tazkeer-o-Tanis (ii) Wahid Jama (iii) Zamana (Mazi, Hal, Mustaqbil) (iv) Ism, Zameer, Sifat
- (v) Muhaware Aur kahawatein (vi) Tashbeeh (vii) Isteara (viii) Talmeeh (ix) Husn-e-Talil (x) Tazad (xi) Majaz-e-Mursal (xi) Tajnees (xii) Kenaya (xiii) Tajahul-e-Aarifana


 Head/विभागाध्यक्ष
 Dept. of Urdu/उर्दू विभाग
 Faculty of Arts/कला संकाय
 B.H.U./का० हि० वि०
 Varanasi/वाराणसी-221005

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TGT व्याकरण का पाठ्यक्रम (syllabus)

1. संज्ञापरिचयः

प्रत्ययाहार संज्ञा , सवर्णसंज्ञा , गुणसंज्ञा , वृद्धिसंज्ञा, घिसंज्ञा , नदीसंज्ञा, टिसंज्ञा, घुसंज्ञा , ।
(सहायक पुस्तक – लघुसिद्धान्तकौमुदी)

2. सामान्य सन्धिपरिचयः

गुणसन्धि , वृद्धिसन्धि, पूर्वरूपसन्धि, यणसन्धि, पररूपसन्धि, हलसन्धि, विसर्गसन्धि ।
(सहायक पुस्तक – लघुसिद्धान्तकौमुदी)

3. शब्दरूपपरिचयः

राम , कवि, नदी , रमा , सर्व , (तीनों लिङ्ग) युष्मद् , अष्मद् , तद् , अदस्, एतद् , वारि, दधि,
पति , राजन् , चतुर् , पञ्चन् , अष्टन् (सहायक पुस्तक – लघुसिद्धान्तकौमुदी)

4. धातुरूपपरिचयः

भू , पठ् , गम् , वद् , कथ् , गद् , गुप् , श्रि , अद् , हन् , ह् , दिव् , कृ , विद् , तनु , तुद् , खाद्
, इच्छ् , क्रीड् , हस् , दृश् , (सहायक पुस्तक – लघुसिद्धान्तकौमुदी)

5. प्रत्ययान्तधातुपरिचयः

पिपठिष , बोभूय , जिगिमिष , वाव्रज्य , के लङ् लकार के रूप ।

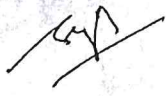
(सहायक पुस्तक – लघुसिद्धान्तकौमुदी)

6. कृतप्रत्ययपरिचयः

तव्यत् , अनीयर् , केलिमर् , त्त्वा , तुमुन् , क्त् , क्वतु , शतृ , शानच् , घञ् , तृच् , ण्वुल् ,
(सहायक पुस्तक – लघुसिद्धान्तकौमुदी)

7. तद्धितपरिचयः

अण् , इञ् , अञ् , यञ् , छ् , ढक् , फक् , तमप् , मतुप् , कन् , कप् , डाच् , त्रल् , थाल् ,
अधुना (सहायक पुस्तक – लघुसिद्धान्तकौमुदी)


8. कारकपरिचयः

कर्ता , कर्म , करण , सम्प्रदान , अपादान , अधिकरण (सहायक पुस्तक – लघुसिद्धान्तकौमुदी)

9. समासपरिचयः

केवलसमासः , द्विगुसमासः , कर्मधारयः , उपपदसमासः , बहुव्रीहिसमासः द्वन्द्वसमासः (सहायक पुस्तक – लघुसिद्धान्तकौमुदी)

10. स्त्रीप्रत्ययपरिचयः

टाप् , डाप् , चाप् , डीप् , डीष् , डीन् , ऊङ् , ति , ष्फ (सहायक पुस्तक – लघुसिद्धान्तकौमुदी)

11. संस्कृतभाषायामनुवादः

सहायक पुस्तक - रचनानुवादकौमुदी

12. हिन्दीभाषायामनुवादः

सहायक पुस्तक - रचनानुवादकौमुदी

14/06/24
आचार्य एवं अध्यक्ष/Professor & Head
व्याकरण विभाग/Deptt. of Vyakarana
काशी हिन्दू विश्वविद्यालय/Banaras Hindu University
वाराणसी/Varanasi-221005

St.

St.

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Syllabus for Sahitya
Written Test

पूर्णांक- 100

25

1. संस्कृत साहित्य का इतिहास

अ. कवि परिचय -

भास, अश्वघोष, कालिदास, दण्डी, वाणभट्ट, भारवि, माघ, श्रीहर्ष

क. उपर्युक्त कवियों का जन्मसमय, जन्मस्थान एवं उनकी रचनाएँ।

ख. उपर्युक्त कवियों के सम्बन्ध में प्रचलित 'आभाणक' और प्रशस्तियाँ।

25

2. आलंकारिक आचार्य -

भरतमुनि, भामह, वामन, आनन्दवर्धन, कुन्तक, क्षेमेन्द्र, मम्मट, जयदेव,

विश्वनाथ और जगन्नाथ।

अ. साहित्यशास्त्र के छह सम्प्रदाय

ब. उपर्युक्त आचार्यों के ग्रन्थ एवं उनके सिद्धान्त

स. काव्यलक्षण, काव्यप्रयोजन, अभिधा का स्वरूप, लक्षणा का स्वरूप,

ध्वनि स्वरूप एवं भेद, भरत रससूत्र

25

3. काव्य एवं रूपक

क. रघुवंशमहाकाव्यम् - सर्ग प्रथम - 1-10 श्लोक

ख. किरातार्जुनीयम् - प्रथमसर्ग - 1-10 श्लोक

ग. शिशुपालवधमहाकाव्यम् - प्रथमसर्ग - 1-10 श्लोक

घ. मेघदूतम् - पूर्वमेघ - 1-5 श्लोक

ङ. अभिज्ञानशाकुन्तलम् - चतुर्थ अङ्क

च. स्वप्नवासवदत्तम् - चतुर्थ अङ्क

15

4. रूपक लक्षण, सन्धियाँ, अर्थोपक्षेपक, रूपक प्रकार, नायक लक्षण

(आधार ग्रन्थ - दशरूपकम्)

05

5. अनुवाद- (क) हिन्दी से संस्कृत - 5 वाक्य

(ख) संस्कृत से हिन्दी - 5 वाक्य या कोई एक श्लोक

05

9.7.24

71

- 1- ज्योतिषशास्त्र का परिचय एवं भेद ।
- 2- पञ्चाङ्ग परिचय ।
- 3- कालमान (घट्यादि), पक्ष, मास, ऋतु, अयन आदि ।
- 4- राशियों का परिचय ।
- 5- ग्रहों का परिचय ।
- 6- द्वादश भावों का परिचय एवं विचारणीय विषय ।
- 7- विंशोत्तरी दशा, अष्टौत्तरी दशा, योगिनी दशा विचार ।
- 8- ग्रहों का राशियों में भ्रमणकाल एवं फल प्रदान काल, ।
(देवा, + सौदे साती + मंगली विचार)
- 9- भद्रा, पञ्चक, गण्डभूल नक्षत्र ज्ञान ।
- 10- मुहूर्तों का सामान्य ज्ञान ।
- 11- सामान्य यात्रा विचार ।

अध्यक्ष
ज्योतिष विभाग
काशी हिन्दू विश्वविद्यालय

15/6/24

अध्यक्ष/HEAD
ज्योतिषविभाग/Dept. of Jyotish
संस्कृतविद्या धर्मविज्ञान संकाय/Faculty of S.V.
काशी हिन्दू विश्वविद्यालय/Banaras Hindu University
वाराणसी-221005/Varanasi-221005

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टी.जी.टी. वेद सहायक अध्यापक स्कूल बोर्ड टीचिंग सेलेबस

शुक्लयजुर्वेद संहिता— वेददीपभाष्य का सामान्य अध्ययन

- ऋषि
- देवता
- छन्द
- विनियोग सहित

वैदिक साहित्य का सामान्य परिचय

1. प्रकृति-विकृति पाठ का सामान्य परिचय
2. गृह्यसूत्रों का सामान्य परिचय (पारस्कर आदि)
3. ब्राह्मण ग्रन्थों का सामान्य परिचय
4. वैदिक छन्दों का सामान्य परिचय (पिंगलछन्दसूत्र)

वैदिक श्रौत तथा स्मार्तयागों का सामान्य परिचय

वेदांगों का सामान्य परिचय

वैदिक साहित्य का इतिहास (आचार्य बलदेव उपाध्याय)

.....

13.6.24

आचार्य एवं अध्यक्ष वेद-विभाग
Professor & Head Deptt. of Veda
संविधानसंघ काशी हिन्दू विश्वविद्यालय
Faculty of S.V.D.V Banaras Hindu University
वाराणसी-221005
Varanasi-221005

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Syllabus for Agriculture TGT

S.NO.	TOPIC
1.	Agriculture in India: History, importance, and scope; Food grain production since Independence and its future projections; Food security and impact of globalization on Agriculture; Technological and Institutional reforms and scope of commercialization of Agriculture in India.
2.	Agroforestry, Sericulture, Beekeeping/Apiculture: Importance and scope in India.
3.	Seed: Important parts; types and production of seeds.
4.	Plant cell: cell structure and its division; Mendel's laws of inheritance; Role of Genetics in Plant breeding; self and cross-pollinated crops; methods of breeding in field crops; tissue and cell culture; scope of Plant Biotechnology in crop production
5.	Agrometeorology: Important elements and impact of climate change in relation to crop production.
6.	Tillage and Agricultural implements: Principles and practices of tillage operations in crops and use of various agricultural implements.
7.	Soil and soil fertility: Soil types of India and their characteristics (Soil pH, soil texture, soil structure, soil organisms, soil fertility and soil health);
8.	Plant nutrients: Essential plant nutrients; their functions and deficiency symptoms. Fertilizers and Manures: Organic manure; common fertilizers including straight, complex, fertilizer mixtures; biofertilizers; Integrated nutrient management system.
9.	Irrigation and drainage: Sources of irrigation; scheduling of irrigation based on critical stages of growth, time interval, soil moisture content and weather parameters; water requirement of crops; methods of irrigation and drainage; watershed management.
10.	Sustainable crop production and farming systems: Cropping seasons and Crop rotation; Intercropping, Mixed cropping, Organic farming, Rainfed farming, Dry farming and Shifting cultivation; Classification of field crops and cultivation practices of some major cereals, pulses, millets, oil seeds, fiber, sugar and forage crops, non-food crops (medicinal and aromatic plants, plantation and spice crops); Importance of cash and catch crops.
11.	Weed management: weeds of important crops; principles and methods of weed control;
12.	Insect pests of crops: Major insect pests of economically important field crops, vegetables, fruit crops and their management; Integrated Pest Management (IPM).
13.	Diseases of crops: Causes of plant diseases; major diseases of economically important field crops, vegetables, fruit crops and their management with the use of pesticides, organic amendment and bioagents. Integrated disease management (IDM).
14.	Horticulture: Importance of Olericulture, Floriculture and Pomology; Importance of fruits and vegetables in human diet, crop diversification and processing industry; Layout of Orchard, ornamental gardening and kitchen gardening; Propagation by seed, cutting, budding, layering and grafting; Cultivation practices of fruits – (i) mango, papaya, banana, guava, citrus, grapes (ii) Vegetables - Radish, carrot, potato, onion, cabbage, cauliflower, brinjal, tomato and spinach. (iii) Flowers - Gladiolus, canna, chrysanthemums, roses and marigold; Principles and methods of fruit and vegetable preservation.
15.	Animal husbandry and Dairying: Importance of livestock in agriculture and industry; Important livestock breeds and their distribution in India; White revolution in India Livestock care and management; Common diseases of livestock their prevention and control, Livestock improvement through breeding and modern techniques; Dairy management; Processing and marketing of milk and milk products.

Syllabus for the Performing Arts (Department of Vocal Music) Subject : North Indian Classical VOCAL MUSIC	
Units	Topic
I	Theoretical Knowledge of the following Ragas & Talas a (Detailed illustration with Comparative and analytical study) i. Raga: Bilawal, Bhairav, Yaman, Bhupali, Durga, Vrindabani Sarang, Bhimpalasi, Patdeep, Marwa, Sohini, Puriya, Bageshree, Rageshree, Todi, Gurjari Todi, Basant, Paraj, Hindol, Kedar, Kamod, Jaunpuri, Darbari, Adana, Asawari, Khamaj, Kafi, Tilang, Deshkar, Hameer, Bahar, Desh, Bihag, Madhuvanti, Lalit, Marubihag, Jog, Jogkauns, Ahir Bhairav, Shuddha Sarang, Shyam Kalyan and various other ragas prescribed for the syllabus of Diploma, UG and PG (Vocal Music Courses) running in various University Departments ii. Talas: Ektaal, Jhaptal, Rupak, Jhumra, Tilwada, Deepchandi, Addha, Teentaal, Dadra, Kaharwa, Dhamar, Chartaal, Sultaal, Panchamsawari iii. Layakari : Thah, Dugun, Tigun, Chaugun and Three in two Layakari (2/3)
II	Brief history of Indian Music
III	Definition, short explanation of Basic Musical Terminologies : Sangeet, Dhvani, Naad, Shruti, (Swar- Shuddha, Vikrit, Chal, Achal), Swar Saptak, Ashtak, Mandra-Madhyam-Taar, Purvang – Uttarang , Bandish, Sthai – Antara. Sanchari – Abhog, Aalap – Taan, Raga – Jati, , Varn- Alankar, Jatiswaram Raga, Aaroha, Avaroha, Pakad, Laya, Tala , Matra, Theka, Vibhag, Taali – Khali, Sam, Saam Gaan, Marg – Deshi, Vadi – Samvadi, Vivadi, Anuvadi, Graha - Ansh, Nyasa, Alpatva – Bahutva. - Gandharv, Gaan, Swar - samvad, Taan, Bol -Taan, Aavirbhav, Tirorbhav Meend, Kan, Khatka, Murki, Krintan, Jod – Jhala, Sut, Ghaseet. Raga Bhed : Shuddha, Chhayalag, Sankeern. Harmony & Melody

IV	Concepts of Indian Classical Music • Elementary applied Physics : Definition of Sound, Vibration, Frequency, Naad and Rava ,Tarata (Pitch), Tivrata (Magnitude) and Guna (Timbre) • Gram, Murchhana, • Jati system, Dashvidh rag Vargikaran System, Ragang system, That and Mela system, That & Ragang system. • Chatusarana, • Gamak, Alapti, Geeti & Bani, • Rag Samay Siddhant, • Karnatak Mela & Hindustani That names. • Brief Study of Karnatak Taal system. • Kutap & Brinda
V	Names of Various Gharanas Composers and Musical Texts: • Pen names of Various Composers • Names of the Musical Texts and their authors • Name of various Vocal Music Gharanas & Name of the Eminent Artists belonging to various Gharanas
VI.	Musical forms : Brief description about Lakshan Geet, Sargam Geet, Kriti, Padam Musical Forms: Khayal, Dhrupad, Dhamar, sadara ,Tarana, Chaturang, Tirwat, Thumri, Dadra, Kajri, Chaiti
VII	Brief study of Texts: Natyashastra, Sangeet Ratnakar
VIII	Notation System: i Notation System evolved By Pt. Vishnu Digambar Paluskar ii. Notation System evolved By Pt. Vishnu Narayan Bhatkhande
IX	Rasa and Bhav : Various views regarding Rasa siddhant Aesthetic : Indian and Western approaches
X	Classification of Indian Musical Instruments : The four categories of Indian classical Musical Instruments
XI	Essay: Any topic related to Music

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Practical Course:

Study of the following Ragas with Detailed Illustration for Performance and Vibe:

Raga – Bilawal, Bhairav, Yaman, Bhupali, Durga, Vrindaban Sarang, Bhimpalasi, Fatdeep, Vibhas, Marwa, Sohini, Puriya, Bageshree, Rageshree, Todi, Gurjari Todi, Basant, Faraj, Hindol, Kedar, Kamod, Jaunpuri, Darbari, Adana, Asawari, Khamaj, Kafi, Tilang, Deshkar, Hameer, Bahar, Desh, Bhag, Madhuvanti, Lalit, Marubhag, Jog, Jogkauns, Ahir Bhairav, Shuddha Sarang, Shyam Kalyan and various other ragas prescribed for the syllabus of Diploma, UG and PG (Vocal Music Courses) running in various University Departments

- Ability to perform Bandish in Vilambit Khyal and Drut Khyal In a choice raga from the syllabus with Aalapchari and Taans and ability for critical analysis with demonstration of the other ragas of the syllabus
- Ability to perform other musical forms i.e. Dhrupad, Dhamar, Tarana, Tirwat, Chaturang, Saragam Geet, Thumri, Dadra, Kajri, Chalti, Bhajan, Prarthana Geet, Patriotic Songs and other occasional songs etc.
- Ability to compose songs for various occasions
- Other Desirable ability – Playing Accompanying Instruments like Harmonium, Keyboard, Tabla etc.

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Syllabus for the Performing Arts (Department of Instrumental Music) Subject: North Indian Classical Instrumental MUSIC-Non-Percussion	
Units	Topic
I	Theoretical Description of the following Ragas & Talas a (Detailed illustration with Comparative and analytical study) i. Raga: Bilawal, Yaman, Bhairav, Bhairavi, Todi, Asawari, Poorvi, Khamaj, Kafi, Marwa, Bhupali, Durga, Vrindabani Sarang, Bhimpalasi, Patdeep, Sohini, Bageshree, Rageshree, Gurjari Todi, Basant, Paraj, Hindol, Hameer, Kedar, Kamod, Jaunpuri, Darbari, Adana, Deshkar, Miyan Malhar, Bahar, Desh, Bihag, Madhuvanti, Lalit, Marubihag, Jog, Ahir Bhairav, Nat Bhairav, Shuddha Sarang, Shyam Kalyan, Malkauns, Bilaskhani Todi, Jinjhoti, Bairagi, Multani, Madumad Sarang, Puriya Dhanasri, Puriya Kalyan, Binna Shadaj, Hemant, Megh malhar and various similar ragas for comparative study. ii. Talas: Teentaal, Tilwada, Panchamsawari, Deepchandi, Jhumra, Ektaal, Jhaptal, Rupak, Addha, Dadra, Kaharwa, Dhamar, Chartaal, Sultaal, Tivra iii. Layakari : Thah, Dugun, Tigun, Chaugun and Aad (3/2), Kuaad (5/4)
II	Brief history of Indian Music From Vedic to Modern Period
III	Brief study of Texts: Natyashastra, Sangeet Ratnakar, Brihaddesi and Rag tarangani
IV	Names of Various Instrumental Music Gharanas Composers and Musical Texts: • Different Shaili (Baj) Masit khani, Raza Khani, Ameer Khani • Names of the Musical Texts and their authors • Name of various Gharanas of Instrumental Music & Name of the Eminent Artists belonging to these Gharanas
V	Definition, short explanation of Basic Musical Terminologies : Sangeet, Dhwani, Naad and its characteristic, Shruti, (Swar- Shuddha, Vikrit, Chal, Achal), Swar Saptak, Ashtak, Mandra-Madhya-Taar, Purvang – Uttarang, Bandish, Gat, Sthai – Antara. Sanchari – Abhog, Aalap, Jod Alap, – Taan, Toda, Raga – Jati, , Varn- Alankar, Jati swaram Raga, Aaroha, Avaroha, Pakad, Laya, Tala, Matra, Theka, Vibhag, Taali – Khali, Sam, Saam Gaan, Marg – Deshi, Vadi – Samvadi, Vivadi, Anuvadi, Graha - Ansh, Nyasa, Alpatva – Bahutva. - Gandharv, Gaan,

AA. K. N.

	Swar - samvad, Taan, Bol -Taan, Aavibhavy, Tirobhavy Meend, Kan, Khalka, Murld, Krintan, Jod - Jhala, Sut, Ghaseet. Raga Bhed : Shuddha, Chhayanag, Sankeern. Harmony & Melody
VI	Concepts of Indian Classical Music • Elementary applied Physics: Definition of Sound, Vibration, Frequency, Nand and Ravn ,Tara (Pitch), Tivara (Magnitude) and Guna (Timbre) • Gram, Murchhana, • Jati system, Dashvaidh rag Vargikaran System, Ragang system, That and Mela system, That & Ragang system. • Chatusarana, • Gamak, Alapti, Geeti & Bani, • Rag Samay Siddhant, • Karnatak Mela & Hindustani That names. • Brief Study of Karnatak Taal system. • Kutap & Brinda • Kaku
VII	Musical forms : Brief description about Lakshani Geet, Sargam Geet, Kriti, Padam Musical Forms: Khayal, Dhrupad, Dhamar, sadara ,Tarana, Chaturang, Tirwat, Thumri, Dadra, Kajri, Chaifti
VIII	Notation System: i Notation System evolved By Pt. Vishnu Digambar Paluskar ii. Notation System evolved By Pt. Vishnu Narayan Bhatkhande iii. Staff Notation system
IX	Rasa and Bhav : Various views regarding Rasa siddhant Aesthetic: Indian and Western approaches
X	Classification of Indian Musical Instruments : The four categories of Indian classical Musical Instruments Different views of regarding classification of Instrumental from Ancient to modern
XI	Essay: Any topic related to Music

Practical Course:

Study of the following Ragas with Detailed illustration for Performance and Viva:

[Handwritten signatures]

Bilawal, Yaman, Bhairav, Bhairavi, Todi, Asawari, Poorvi, Khamaj, Kafi, Marwa, Bhupali, Durga, Vrindabani Sarang, Bhimpalasi, Patdeep, Sohini, Bageshree, Rageshree, Gurjari Todi, Basant, Paraj, Hindol, Hameer, Kedar, Kamod, Jaunpuri, Darbari, Adana, Deshkar, Miyan Malhar, Bahar, Desh, Bihag, Madhuvanti, Lalit, Marubihag, Jog, Ahir Bhairav, Nut Bhairav, Shuddha Sarang, Shyam Kalyan, Malkauns, Bilaskhani Todi, Jinjhoti, Bairagi, Multani, Madumad Sarang, Puriya Dhanasri, Puriya Kalyan, Binna Shadaj, Hemant, Megh Malhar and various similar ragas for comparative study.

- Ability to perform Gat in Vilambit and Drut in a choice raga from the syllabus with Aalapchhari and Taans, Jhala and ability for critical analysis with demonstration of the other ragas of the syllabus
- Ability to perform compositions in Teentaal, Panchamsawari, Ektaal, Jhaptaal, Rupak, Addha, Dadra, Kaharwa, Dhamar, Chartaal, Sultaal,
- Ability to compose different orchestra
- Other Desirable ability – Ability to Accompanying with any song, Ability to handle different Instruments and there tuning.

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