

Syllabus for exam to the post of TGT (Arts)

Upto Graduation Level Subjects

(a) History:

I. Ancient History (upto 1206 AD)

- Prehistory; Palaeolithic cultures; Mesolithic cultures-chronological order and geographical distribution; Advent of Chalcolithic culture: Harappan civilization, origin, extent, town planning, nature of political and economic organization and decline.
- Rise of the territorial states: Emergence of Iron Age culture; Megaliths in the Deccan and South; The Mauryan Empire: State, administration and economy, Ashoka's Dhamma and Architecture; Post-Mauryan period: Sungas, Saka, Satvahanas, Kushanas, Chera-Chola-Pandya struggle in South India.
- The age of the Guptas: State, administration and economy, decline of Gupta Empire, Harshavardhan and administration, Chalukyas; Tripartite struggle: Gurjara, Pratiharas, Palas and Rashtrakutas; South India: Pallavas, Cholas; Invasion of the Arabs, Mahmud Ghazni, Mohammad Ghori and their impact.

II. MEDIEVAL INDIA (1206-1707).

- Foundation and consolidation of the Delhi Sultanate, Turkish rulers; Khilji Administration, military system, Economic reforms, Experiments of Mohammad-Bin Tughluq and Feroz Tughlaq; Religious life: Bhakti and Sufi movement; Architecture structure and Decline of sultanate.
- India in 1526 and the Mughal-Afghan Struggle: Babur's campaigns; Humayun and his difficulties, Sher Shah Suri and his administration; Consolidation of Mughal rule under Akbar: Political expansion, Rajput and religious policies of Akbar sulh- i-kul.
- Jahangir, nobility and Court politics; Expansion in the Deccan under Shahjahan and Aurangzeb; Aurangzeb: The war of succession (1658-59), religious policy; Rise of Maratha power under Shivaji and his immediate successors.
- Architecture of Mughals and Administrative structure Mansabdari, Jagirdari, central and provincial administration; Land revenue system: Sher Shah to Aurangzeb; Decline of Mughal empire; Regional successor states: Hyderabad, Bengal and Awadh; Rise of European trade in India.

III. MODERN INDIA (1707-1950 A.D)

- Regional successor states: Maratha, Hyderabad, Bengal and Awadh; Rise of European companies in India; Expansion and Consolidation of British Empire; Tools of Expansion: War and Diplomacy; Growth

of Colonial Administrative Apparatus.

- Economic and Social Change; Land Revenue Settlement; Socio-Religious Movements (Status of Women); Popular Resistance to Company Rule.
- Pre-1857 Peasant and Tribal Movements; The Revolt of 1857- Causes, Nature and Results; The Peasants and Workers Movements; Rise of Indian Nationalism and Economic Nationalism.
- Formation of the Indian National Congress, The Moderates and Extremists; Partition of Bengal, Swadeshi Movement and formation of the Muslim League;
Emerging Communal Trend and Constitutional Development Upto 1919, Rowlatt Satyagrah and Jallianwala Bagh; Rise of Gandhi and Nature of Gandhian Movements; Khilafat and Non-Cooperation Movements, Civil Disobedience Movement.
- Act of 1935, Quit India Movement; Constitutional negotiations: Cabinet Mission, Mountbatten Plan; Independence and Partition, Integration of Princely States; Making of the Constitution.

IV. European History:

French Revolution, Industrial Revolution, Unification of Germany, Unification of Italy, First World War, League of Nations, Russian revolution and Socialism, Fascism in Italy, Nazism in Germany, Second world War, United Nations Organization.

(b) Geography:

- I. **Origin of the Earth:** The solar system & theories regarding the origin of the earth; **Earth Movements:** Rotation, Revolution, Occurrence of Day and Night; change of seasons; Latitudes and Longitudes; **Earth's Interior:** Origin of continents and ocean basins; Wegener's Continental drift theory, Theory of Plate Tectonics, Earthquakes and Volcanoes, Folding and faulting; **Rocks:** Types of rocks and their characteristics.
- II. **Agents of Gradation:** Weathering, mass wasting, running water, wind, glaciers, sea waves and karst topography.
- III. **Atmosphere:** Composition and structure, elements of weather and climate, Climatic zones, greenhouse effect, global warming, climate change; **Insolation and Heat Budget:** Heating and cooling of atmosphere, Temperature, Factors controlling temperature; **Air Pressure and Atmospheric circulation:** Pressure belts, permanents, Seasonal winds, El- Nino and La-Nina, cyclones and anti- cyclone; **Humidity and Precipitation:** Evaporation, condensation and precipitation, Humidity, rainfall and its types, clouds and types of clouds.
- IV. **Hydrosphere:** Major Oceans, water cycle, distribution of

temperature and salinity, Ocean tides and ocean currents of Atlantic, Pacific and Indian Ocean, coral reefs; **Biosphere:** Ecosystem and Ecology, structure and functions of Ecosystem, Food Chain, Food Web, Biodiversity and its conservation.

- V. **Maps** and their classification, elements of maps, globe, Isopleths lines, line and bar graphs.
- VI. **Geography of India-Physical Setting:** Location and its neighbours, Major physiographic regions of India i.e. the Himalayas, North Plain of India, Peninsular plateau, Coastal Plains and Islands;
- VII. **Climate of India:** Factors, Characteristics, the monsoon and western disturbances, local winds; **Soils of India:** factors and classification, soil erosion, conservation and problems; **Drainage systems:** Himalayan rivers, Peninsular rivers, Interlinking of rivers.
- VIII. **India's Flora and Fauna.**
- IX. **Population and its Characteristics:** Population Distribution, density, growth, Literacy rate, Sex ratio, major religions, languages, cultural realms and tribes.
- X. **Settlement System:** Rural Settlements, Types and Patterns, Urban Settlements.
- XI. **Resource Base:** Source of Energy, renewable and non renewable.
- XII. **Minerals:** metallic and non metallic.
- XIII. **Agriculture practices and seasons:** types of agricultural practices, green revolution and its impacts, crops their types and distribution, sources of irrigation
- XIV. **Major Industries and industrial zones:** Cotton Textile, Iron-Steel, Jute, Sugar.
- XV. **Means of Transportation:** Roads, Railways, waterways and airways.
- XVI. **World Geography-**Continents and oceans, rivers, lakes. Deserts, climate, natural vegetation, major biomes, types of economic activities. Population distribution, density and growth, Human Races, Tribes, major languages and religions.
- XVII. **Disasters and Hazards-Type of Disasters/hazards:** Natural & Manmade, causes and preventive measures and mitigation strategies, NDMA, SDMA and NIDM; **Disaster Management:** Pre-disasters, during disasters and after disasters and Community based Disaster management.
- XVIII. **Modern Trends and Techniques in Geography-**Remote Sensing, GPS, Geographic Information System, Georeferencing

(c) **Economics:**

- I. **Basic Concepts of Economics :** Definition, scope and importance of economics; Positive vs normative economics; Microeconomics and

macroeconomics; Human wants – types and characteristics; Goods and services – classification; Economic problems: scarcity and choice; Opportunity cost and Production Possibility Curve; Central problems of an economy; Types of economic systems.

- II. **Consumer Behaviour and Demand:** Demand: meaning, determinants, law of demand, exceptions; Movements vs shifts in demand curve; Utility: cardinal and ordinal approaches; Law of diminishing marginal utility; Equi-marginal utility principle; Indifference curve analysis: properties, consumer's equilibrium; Elasticity of demand: Price elasticity, Income elasticity, Cross elasticity and measurement; Factors influencing elasticity of demand; Consumer surplus – concept and measurement.
- III. **Producer Behaviour and Supply:** Law of supply and its exceptions; Determinants of supply; Movements and shifts in supply curve; Elasticity of supply; Production function: short-run and long-run; Laws of Production; Producer Equilibrium.
- IV. **Costs and Revenue:** Cost concepts: fixed, variable, total, average, marginal; Short-run and long-run cost curves; Economies and diseconomies of scale; Revenue concepts: total, average, marginal; Relationship between AR and MR under different market conditions; Break-even analysis.
- V. **Forms of Market and Price Determination:** Market forms: perfect competition, monopoly, monopolistic competition, oligopoly; Price determination under perfect competition; Price and output under monopoly; Price discrimination – meaning and types; Features and price determination under monopolistic competition; Oligopoly – features, kinked demand curve, collusive and non-collusive models; Factor pricing: rent, wages, interest, and profit – basic theories.
- VI. **National Income and Related Aggregates;** Concepts: GDP, GNP, NDP, NNP, personal income, disposable income, per capita income; Real and nominal GDP, GDP deflator; Methods of measuring national income: product, income, expenditure; Difficulties in measurement of national income; Circular flow of income- two sector and three-sector models; Importance and limitations of national income statistics.
- VII. **Money and Banking :** Money: meaning, function, types and role in economy; Inflation and deflation: meaning, causes, effects, control measures; Banking system: function and types of bank; Central Bank: RBI function, credit control methods (quantitative & qualitative); Commercial banks: credit creation, functions; Money market and capital market-structure and function; Financial inclusion and digital banking.
- VIII. **Determination of Income and Employment:** Classical theory of

employment; Keynesian theory: effective demand, aggregate demand, and supply; Consumption function and investment function; Multiplier and accelerator concepts; Equilibrium level of income and employment; Role of fiscal and monetary policies to stabilize economy.

IX. **Government Budget and the Economy:** Meaning and components of government budget; Public revenue: sources, classification, canons of taxation; Revenue and capital expenditure; Revenue and capital receipts; Fiscal deficit, primary deficit; Types of taxes: direct and indirect; Fiscal federalism; Fiscal policy: objectives, tools, and limitations.

X. **Indian Economy**

(a) **Structure and Features:** Characteristics of the Indian economy; Demographic profile: population trends and challenges; Natural resources and economic development.

(b) **Agriculture:** Role of agriculture in Indian economy; Land reforms and Green Revolution; Modern agricultural techniques; Problems of Indian agriculture; Government schemes and subsidies.

(c) **Industry:** Industrial growth and structure; Public sector and private sector; Industrial policies in India; MSMEs and Make in India initiative.

(d) **Services Sector:** Growth and contribution to GDP; IT, communication, tourism, banking.

(e) **Economic Reforms since 1991:** Liberalization, privatization, globalization; FDI and its impact.

XI. **Poverty, Unemployment & Inequality:** Definitions, types and causes; Trends in poverty and unemployment in India; Government schemes for poverty alleviation and employment; Human Development Index.

XII. **Development Economics.**

Meaning & scope of development economics; economic growth vs economic development; indicators of economic development; theories of economic growth and development ; problems of developing economies; role of capital formation, human resources and technology in development.

XIII. **Development and Planning in India:** Objectives and achievements of Five-Year Plans in India; NITI Aayog – role and functions; Rural development: objectives, policies, and programs; Inclusive growth and sustainable development; Regional imbalance and remedial measures.

XIV. **International Trade and Institutions:** Basis of international trade: absolute and comparative advantage; Gains from trade and terms of trade; Free trade vs protection – arguments for and against; Importance of foreign trade for India; Balance of Payments and trade balance; Foreign exchange rate: fixed vs flexible; Role of international institutions: WTO, IMF, World Bank etc; India's trade policy and

major trade partners.

- XV. **Current Economic Issues:** GST and its impact; Inflation: types, causes, effects, WPI/CPI; Unemployment: types and trends; Climate change and economy; Recent government schemes; Sustainable Development Goals.
- XVI. **Economy of Himachal Pradesh:** Features of the Himachal economy – geography and development constraints; Sectoral composition: primary, secondary and tertiary sector; Role of tourism and hydropower in state development; Rural development and Panchayati Raj in Himachal Pradesh; Employment and migration trends; Government schemes and welfare programs; Industrial policy and small- scale industries in Himachal Pradesh

(d) Political Science:

- I. **Political Theory:** Politics; Political Theory; State; Liberty; Equality; Justice; Rights; Protective Discrimination; Democracy; Socialism; Secularism; Marxism; Gandhian approach.
- II. **Indian Government and Politics (Indian Constitution)** ; Constituent assembly; Preamble; Fundamental Rights; Directive Principles of state policy; Parliament; Prime Minister; Judiciary; President; Budget; Election commission; Local self governments; Political parties; Caste; Patriarchy; Planned Economy; Social Movements; Citizenship; Centre state relations; Emergency provisions; Finance Commission; Comptroller and Auditor General of India; Attorney General of India ; Anti- defection Law; Official language; Central Bureau of Investigation (CBI).
- III. **Comparative Govt. and Politics**: Classification of Political System; Electoral System; Party System.
- IV. **International Relations**: Approaches to study international Relations; Cold war; United Nations; WTO; ASEAN; SAARC; India's Foreign Policy.

(e) Public Administration:

- I. **Public Administration**, Organization, Decision making, Leadership, Communication, Coordination.
- II. **Indian Administration, Civil Services** in India, Union Public Service Commission, State Public Service Commission.
- III. **Constitutional Authorities:** FCI, ECI, CAG.
- IV. **Non -Constitutional Bodies: Lok Pal and Lokayukta**, Citizen's Charter, **RTI Act- 2005**.
- V. **Administrative Thinkers:** Kautilya, Mahatma Gandhi, F.W. Taylor, Elton Mayo, Max Weber, Herbert Simon, Abraham Maslow, Frederick Herzberg.
- VI. **Development Administration**, Machinery for Planning in India and States.
- VII. Political Parties, NGO's, Self Help Groups (SHGs), Bureaucracy.
- VIII. **Local Self government.**

- IX. Globalization, Public-Private-People Partnerships, Corporate Social Responsibility, Citizen- Centric Administration, **Human Rights**, National Human Rights Commission (NHRC).
- X. **Good Governance**, Consumer Protection Act 1986.
- XI. Women Empowerment, Welfare of Weaker Sections: SC/ST and OBC's, Children and Aged.
- XII. **Environmental Administration**, Environmental Protection Act 1986, National Green Tribunal, Centre Pollution Control Board and State Pollution Control Board.
- XIII. **Public Policy**, Public Policy Making Organs in India.
- XIV. **Social Welfare Administration** and Social Welfare Policies.
- XV. Public Service Delivery and Redressal of Public Grievances.
- XVI. **Public Finance**, Financial Administration, Fiscal Federalism, Centre-state- Financial Relations, Finance Commission, Tax Administration, CBDT, CBIC, GST, Budget,CAG and RBI.
- XVII. Parliamentary Control over Finance, Parliamentary Committees.
- XVIII. **E-Governance**, E-learning, E-commerce, E-health.
- XIX. **Disaster Management**, NDMA Act 2005, NDMA, NDRF, SDRF.
- XX. Emergence, Administrative History, **Administrative Set up of HP**

(f) Sociology

- I. **Meaning**; History of Sociology (Origin and Development); Nature and Significance.
- II. **Scope and Subject Matter**: Relationship of Sociology with Anthropology, History and Psychology.
- III. **Basic Concepts**: Society; Community; Institutions and Associations; Status and Role.
- IV. **Sociological Concepts**: Socialization; Culture; Social Change & factors of social change; Social Groups.
- V. **Society in India; India as a Plural Society**: Meaning and Characteristics of Plural Society; Traditional Basis of Indian Society; Unity and Diversity.
- VI. **Social Institutions**: Caste; Class; Tribe; Family; Marriage and Kinship.
- VII. **Identities and Change**: Dalit's Movement; Women's Movement; Policies and Programmes for the upliftment of Dalits and Women.
- VIII. **Challenges to State and Society**: Communalism; Secularism and Casteism.
- IX. **Sociological Theories of August Comte; Karl Marx; Max Weber; Emile Durkheim**
- X. **Methods of Sociological Enquiry; Logic of Social Research; Methodological Perspectives & Modes of Enquiry.**
- XI. **Techniques of Social Research: Research Design; Data Collection; Data Analysis; Statistical Analysis**
- XII. **Concept, Meaning, Need & Importance of Sociology of Environment.**
- XIII. **Environment and Resources**: Environment and Natural Resources; Ecology, Ecosystem and Society

- XIV. **Development and Environment:** Industrialization, Urbanization and Environmental Degradation; Depletion of Natural Resources and Pollution - Air, Water and Soil.
- XV. **Contemporary Environmental Concerns:** Deforestation and Ecological Crises; Global Warming and Climate Change; Construction of Dams and its Impacts
- XVI. **Social Demography:** Meaning, Nature and Development of Social Demography; Scope and Importance of Social Demography
- XVII. **Demographic Processes:** Fertility ; Mortality; Migration
- XVIII. **Population Theories:** Malthusian Theory of Population; Theory of Demographic Transition; Theory of Optimum Population
- XIX. **Population Growth and its Impact:** Economic and Social :Consequences; Environment (Pollution and Depletion of Resources); Population Policy in India
- XX. **Theory and Practice of Development:** Meaning, Characteristics and Dimensions of Development (ii) Social Change and Social Progress;
- XXI. **Recent Trends in Development:** Global Inequalities in Development; Human Development Theory: Growth vs Development.
- XXII. **Post Development Theory:** Gender and Development(GAD); Public Private Partnership (PPP); Participatory Development and Role of PRIs
- XXIII. **Sustainable Development:** Meaning, Characteristics and Strategies of Sustainable Development; Environmental Discourse; UN Earth Charter 1992
- XXIV. **Religion and Society:** Sociology of Religion: Meaning, Nature and Scope; Sacred and Profane; Functions of Religion
- XXV. **Religion in India-I:** Hinduism: Islam
- XXVI. **Religion in India-II:** Christianity; Buddhism and Sikhism
- XXVII. **Secularism and Communalism:** Secularism: Meaning, Characteristics and Factors of Secularism; Communalism: Meaning, Characteristics and Factors of Communalism.
- XXVIII. **Marriage, Family and Kinship: Marriage:** Meaning, characteristic, & significance of marriage; **Family & Household:** Meaning, Characteristics & types of family & household; reimagining family; **Kinship:** Meaning, degree & types of kinship; **Contemporary Issues in Marriage, Family and Kinship**
- XXIX. **Social Stratification:** Meaning, Characteristics and Basis of Social Stratification; Social Differentiation, Social Inequality and Hierarchy
- XXX. **Forms of Social Stratification:** Race and Ethnicity; Caste, Class and Gender
- XXXI. **Approaches of Social Stratification:** Karl Marx; Max Weber; Talcott Parsons; Kingsley Davis & Wilbert E. Moore
- XXXII. **Social Mobility:** Meaning, Characteristics and Factors of Social

- Mobility; Types of Social Mobility
- XXXIII. **Gender and Sexuality:** Sociology of Gender; Gender as a Social Construct; Gender and Sex; Gender Roles
- XXXIV. **Gender Differences and Inequalities:** Concept of Gender Inequality; Gender based Division of Labour; Gender and Caste; Gender and Class
- XXXV. **Gender Discrimination:** Meaning, Causes and Consequences; Remedial Measures for Removing Gender Discrimination
- XXXVI. **Gender Equality:** Constitutional Provisions for Women; Quest for Gender Equality; Women Empowerment: Meaning, Policies and Programmes for Women Empowerment; Women Movements
- XXXVII. **Polity and Society in India:** Meaning, Nature and Characteristics of Political Sociology; Scope and Significance of Political Sociology
- XXXVIII. **Political Identities:** Caste as a Factor of Political Identity; Religion and Ethnicity as Factors of Political Identity
- XXXIX. **Political Processes:** Democracy and Bureaucracy; Power and Authority
- XL. **Protest and Resistance in Indian Politics:** Pressure and Interest Groups; Farmers, Women and Dalit Movements
- XLI. **Economy and Society:** Sociology of Economic Life; Sociological Aspects of Economic Processes
- XLII. **Modes of Production:** Domestic and Peasants; Capitalist and Socialist
- XLIII. **Contemporary Issues:** Globalization: Meaning, Characteristics and its Impact on Society; Development: Meaning and Indicators of Development; Global Trends of Development
- XLIV. **New Economic Sociology:** Post Industrial Society; Information, Communication,
Technology and Society; Social Security and Alienation

(g) Subjects of B.Ed Course

Childhood and Development Years; Contemporary India and Education; Language Across the Curriculum; Understanding Disciplines and Subjects; Text Reading and Reflections; Learning and Teaching; Assessment for Learning, Drama and Art in Education; Teaching of Social Science, English, Hindi and Sanskrit; Knowledge and Curriculum; Gender, School and Society; Inclusive School; ICT in Teaching-Learning Process; Understanding the Self, Health and Physical Education; Vocational and Work Education; Education for Peace, Guidance and Counseling.

ENGLISH SECTION

A) Reading Comprehension

Short Unseen Passages: Prose/Poetry/Drama

Factual comprehension questions, Vocabulary-based questions, Synonyms, antonyms, meanings in context.

B) Grammar and Usage

Questions based on: Parts of speech

Tenses & Verbs

Sentence Structure

Applied Grammar and Vocabulary

Identify, Choose the correct, Error Spotting, Fill in the blanks, Choose suitable expression, Sentence improvement.

C) Literature

Shakespeare, Romantic Poets (Wordsworth, Keats, Shelley, Coleridge, Byron etc.), 19th & 20th Century writers (Frost, Hemingway, Shaw, Dickinson etc.) Modern India Writing in English (R.K. Narayan, Mulk Raj Anand, Anita Desai etc.) and Modern World Literature.

Syllabus for the post of JBT

A. Subjects upto 10+2

I. SOCIAL SCIENCE

1. HISTORY

i. Indian History:-

(a) Ancient Indian History –

The earliest Societies-Hunting & gathering as a way of life, its implications; introduction to stone tools and their use; Prehistory and Human Civilization: Paleolithic Age, Mesolithic Age and Neolithic Age; The Copper age, The Bronze Age and The Iron Age; The Indus Valley Civilization: Principal archaeological sites, urban planning, external and internal trade, artistic achievements, industries and crafts, social stratification. Pre-Vedic and Vedic Culture; Religious Movements; Mauryan Empire; The Shakas, The Kushanas, The Satavahanas; Sangam Age : - The Cholas, The Pandya, The Cheras; The Guptas Age; The Post-Guptas Age : The Harshavardhana.

(b) History of Medieval India : -

Turkish invasion in India: -Muhammad bin Qasim, Mahmud of Ghazni, and Muhammad Ghori; The Delhi Sultanate : - The Mamluk (Slave), Khilji, Tughlaq, Sayyad, and Lodi dynasties; Religious Movements: -Sufi movement, Chishti order; The Bhakti Movement: - Shankara, Ramanujacharya, Madhvacharya, Namdev, Gnyaneshwar, Kabir, Guru Nanak, Ravidas, Tulsidas, Surdas, Mirabai and Chaitanya; Mughal Empire; Maratha Empire; Rise of Sikh Empire.

(c) History of Modern India: -

Arrival of European Companies in India; Governor Generals of Bengal; Viceroys of India; Provincial Autonomous States of India and their conflicts with European trading companies; Economic impact of British rule in India; Land settlement during British rule; Revolt of 1857; Social and Religious Reform Movements; National Freedom Movement : - Indian National Congress, Partition of Bengal, Swadeshi and Swaraj, Muslim League, Partition in Congress, Lucknow Pact, Home Rule League, Champaran Movement, Montague August Declaration, Kheda Satyagraha, Ahmadabad

Satyagraha, Rowlett Act, Jallianwala Bagh Massacre, The Khilafat Movement, Non-Cooperation Movement, Swaraj party, Simon Commission, Nehru Report, Zinna Formula, Bardoli Satyagraha, Congress Lahore Session, Dandi March and eleven Demands of Gandhiji, Civil Disobedience Movement, Round-table Conferences, Gandhi-Irvin Pact, Communal Award, Poona Pact, Revolutionary Nationalist Movements of Bhagat Singh, Chandrashekhar Azad, and Subhas Chandra Bose etc., Provincial elections in British India, August Proposal, Demand for a Separate Pakistan, Kripps Mission, Quit India Movement, C. Rajgopalachari Formula, Wavell Plan, Shimla Conference, Cabinet Mission, Mountbatten Plan; Constitutional Development in India: - Regulating Act 1773, Pitt's India Act 1784, Charter Act of 1793, Charter Act of 1813, Charter Act of 1833, Charter Act of 1853, Government of India Act 1858, Indian Councils Act 1861, Indian Councils Act 1892, Indian Councils Act, 1909 – Morley-Minto Reforms, Government of India Act 1935, Cripps Mission – 1942, Cabinet Mission – 1946, Indian Independence Act – 1947.

ii. **European History:-**

French Revolution, Industrial Revolution, Unification of Germany, Unification of Italy, First-World War, League of Nations, Russian revolution and Socialism, Fascism in Italy, Nazism in Germany, Second-world War, United Nations Organization.

2. GEOGRAPHY.

India – Size and Location, India & the world, India's neighbours,; Physical Features of India: majors Physiographic divisions- Himalayan, mountains, northern plains, peninsular plateau Indian desert, coastal plains, Islands; Drainage: concept, drainage system in India, The Himalayan Rivers- Ganga & Brahmaputra River system, the Peninsular Rivers- Narmada Basin, Tapti Basin, Godavari Basin, Mahanadi basin, Krishna basin, Kaveri basin; 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 as a Unifying Bond; **Natural Vegetation** - Types of Vegetation – Tropical Evergreen Forests, Tropical Deciduous Forests, Thorn Forests and Shrubs, Mountain Forests, Mangrove Forests, and **Wildlife**; **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. India's physical environment, resources, and economy: Resources and Development, Forest and Wildlife Resources, Water Resources, Agriculture, Minerals and Energy

Resources, Manufacturing Industries, Lifelines of the National Economy, multipurpose river projects

Universe and Solar System; Lithosphere and Rocks; Rocks and their types; Volcano; Earthquake; Landforms (Mountains, Plateaus, and Plains); **Agriculture and Food Crops**; cropping pattern; Forests and Types of Forests; Minerals; Sources of Power/Energy; Industries and Occupations; Transport and Communication; rain water harvesting; land use pattern in India; land degradation and conservation measures; Types of farming: primitive, subsistence, intensive subsistence, commercial.

3. ECONOMICS

Development- what development promises; different people, different goals, income & other goals; national development; how to compare different countries or states: income and other criteria, public facilities; sustainability of development.

Sectors of the Indian economy- sectors of economic activities; primary, secondary and tertiary sectors in India; division of sectors as organized and unorganized sectors in terms of ownership: public and private sectors.

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.

Globalization and the Indian Economy: Production across countries; Interlinking production across countries; Foreign Trade and integration of markets; Globalization; Factors that have enabled Globalization; World Trade Organization; Impact of Globalization in India; The Struggle for a fair Globalization.

Understanding Economic Development: Sectors of the Indian Economy, Money and Credit, Globalization and The Indian Economy, Consumer Rights; food security in India; challenges of poverty.

4. POLITICAL SCIENCE

What is Democracy? Why Democracy? feature & broader meaning; Constitutional Design: democratic constitution in South Africa ; guiding values of the Indian Constitution & its need; Electoral Politics: our system of election, what makes elections in India democratic; Working of Institutions: how major policy decision taken, Parliament, Political executive, the Judiciary ; Democratic Rights: life without rights, rights in a democracy, rights in Indian Constitution, expanding scope of rights.

Constituent assembly; Preamble of Indian Constitution; Fundamental Rights and Duties; Directive Principles of state policy; Parliament and its two houses; Prime Minister and Council of Ministers; Judiciary at National Level, State and local level; President, Appointment and Powers; Vice-President Appointment and Powers; State Legislative Assemblies; Chief Minister; Chief Minister, Council of Ministers and Powers; Governor, Appointment and Powers; Citizenship; Centre state relations; Emergency provisions; Major Constitutional Amendments. (From 1951 onwards); Budget; Election commission of India; Local self-governments:- Panchayats and Municipalities; Political parties ; Finance Commission; Comptroller and Auditor General of India; Attorney General of India; Anti- defection Law; Official language; Central Bureau of Investigation (CBI); Caste; Patriarchy; Planned Economy; Social Movements.

Democratic Politics: Power Sharing-Belgium & Sri Lanka, majoritarianism in Sri Lanka, Accommodation in Belgium, why power sharing is desirable, forms of power sharing , Federalism- what is federalism, what makes India a Federal country, how is federalism practiced, decentralization in India , Gender, Religion and Caste: gender & politics- , Political Parties, Outcomes of Democracy.

II. MATHEMATICS

Number Systems / Knowing Our Numbers / Real Numbers: Place value, face value; Indian & International numeration systems; Reading, writing, comparing large numbers; Representation on number line; Estimation and rounding of numbers; Natural numbers, whole numbers, integers: definitions and properties; Prime and composite numbers; factors and multiples; Divisibility tests (2,3,4,5,6,8,9,10,11); HCF and LCM (prime factorization, division method) ; Rational numbers: representation, operations, decimal expansion; Irrational numbers ($\sqrt{2}$, $\sqrt{3}$, etc.); classification of real numbers; Laws of exponents (integral & fractional); Fundamental Theorem of Arithmetic; Converting between fractions, decimals, and percentages; Squares and square roots and their properties; Finding cubes, cube roots and related concepts

Whole Numbers, Integers, and Number Operations: Operations on whole numbers and integers; Properties: commutative, associative, distributive; Rules of signs for integers; absolute value; Patterns in whole numbers; Word problems on integers and operations.

Fractions, Decimals, and Percentages Types of fractions and simplification; Equivalent fractions; conversion between forms; Operations on fractions and decimals; Percentage: percent as fraction/decimal, increase/decrease; Applications: discount, profit & loss, simple interest (intro).

Basic Algebra - Expressions, Factors, and Identities: Variables, constants, terms, coefficients, expressions; Writing expressions from statements; Simplifying expressions; Algebraic identities and applications; Factorization methods (common factor, grouping, identities)

Polynomials: Definition, degree, and coefficients; Zero polynomial; zeroes and relationship with coefficients; Remainder and Factor Theorems; Division algorithm for polynomials; Factorization and application problems.

Linear Equations and Linear Equations in Two Variables: One-variable linear equations and word problems; Two-variable equations: general form and solutions; Graphical representation of linear equations; Graphical method of solution of a pair of linear equations; Solving pairs by substitution, elimination method; Consistent/inconsistent/dependent systems; Applications: age, ratio, and mixture problems.

Quadratic Equations: Standard form and meaning of coefficients; Solution by factorization, completing square, quadratic formula; Discriminant and nature of roots; Relation between roots and coefficients.

Arithmetic Progression (AP): Definition and common difference; nth term and sum of n terms formulae; Word problems on sequences.

Ratio, Proportion, and Variation: Ratio and proportion basics; Continued, direct, and inverse proportion; Percentage conversions and mixture problems.

Basic Geometry: Points, Lines, and Angles: Point, line, ray, segment, plane, intersection; Types of angles and their measures; Adjacent, vertically opposite, linear pair angles; Parallel lines and transversal: angle relationships and properties; Intersecting and non-intersecting lines; Line parallel to same line; Euclid's definition, axioms and postulates.

Triangles - Congruence, Similarity, and Properties: Types of triangles by sides and angles; Similar figure, similarity of triangles, criteria for similarities of triangles; Congruence criteria: SSS, SAS, ASA, AAS, RHS; Properties of isosceles and equilateral triangles; Triangle inequality theorem; Similarity criteria: AA, SSS, SAS; Areas of similar triangles; Pythagoras theorem and its converse; Medians, altitudes, bisectors, perpendiculars.

Quadrilaterals and Polygons: Types and properties: parallelogram, rectangle, rhombus, square, trapezium; Conditions for a quadrilateral to be a parallelogram; Diagonal properties; Midpoint theorem; Cyclic quadrilaterals; Angle sum and exterior angle of polygon.

Circles and areas related to circles: Circle terminology: chord, arc, sector, segment, tangent; Angle subtended by a chord at the center; Equal chords and perpendiculars from the center; Tangent properties; lengths of tangents from an external point; Cyclic quadrilaterals and their angle properties; Circumference and area of a circle; Sector and segment: area and perimeter.

Constructions (Compass and Straightedge): Bisecting lines and angles; Drawing perpendiculars and parallels; Constructing triangles (SSS, SAS, ASA, RHS); Constructing similar triangles

Measurement (Area and Perimeter of Plane Figures): Perimeter and area of square, rectangle, parallelogram, triangle, trapezium; Area of a triangle by base-height and Heron's formula; Area of rhombus or kite (diagonals method); Area of polygons (regular and irregular) by decomposition; Area of combined plane figures (including circle sectors/segments).

Surface Areas and Volumes (Solids): Concept of surface area and volume; Cube, cuboid: formulas and applications; Cylinder, cone, sphere, hemisphere; Combined solids and conversion (melting/recasting).

Coordinate Geometry: Cartesian plane and coordinates; Plotting points in four quadrants; Distance formula; Section formula (internal division); Area of a triangle by coordinates.

Introduction to Trigonometry: Trigonometric ratios: sin, cos, tan (in right triangles); Reciprocal ratios: cosec, sec, cot; Trigonometric identities; Complementary angle relationships; Trigonometric ratio of angles (0° , 30° , 45° , 60° , 90°); Simple proofs of identities.

Applications of Trigonometry (Heights & Distances): Angle of elevation and depression; Word problems involving right triangles and heights/distances.

Statistics - Data Handling: Data collection and representation; Frequency distribution (grouped and ungrouped); Graphical representation: bar graph, histogram, frequency polygon; Mean, median, mode (discrete & grouped data); Cumulative frequency and quartiles; Interpretation of data.

Probability: Experimental and theoretical probability; Probability as ratio of favorable to total outcomes; Simple problems on coins, dice, and cards ; Complementary events.
Work & Time; Mensuration; Exponent of Power; Direct & Inverse proportion;
Factorization.

III. SCIENCE

Components of food:-- What do different food items contain? Test for starch, protein and fats. What do various nutrients do for our body? Balanced diet, Deficiency diseases.

Sorting materials into groups:-- Objects around us, Properties of materials (Appearance, Hardness, Soluble, Insoluble) . Objects may float or sink in water, Transparency.

Separation of substances:-- Methods of separation (Hand picking. Winnowing, sieving, sedimentation, decantation and filtration) ,Evaporation.

Getting to know plants:-- (Herbs, shrubs and trees), Stem, leaves, Root, Flower.

Body movements:-- Human body and its movements, Ball and socket joints, Pivot joints, Hinge joints. Fixed joints, Skeleton, Gait of animals(Earthworm, snail, Cockroach, birds, Fish). How do snakes move?

The living organisms, characteristics, and habitat:--Organisms and the surroundings, where they live, Habitat and adaptation , A journey through different habitats, Some terrestrial habitats ,Some aquatic habitats ,Characteristics of organisms.

Motion and measurement of distances:--Story of transport, How wide is this desk? Some measurements, Standard units of measurements, Correct measurement of length, Measuring the length of a curved line, Moving things around us, Types of motion.

Lights, shadows, and reflections: -- Transparent, Opaque and translucent objects, What exactly are shadows? Pin hole camera, Mirrors and reflections.

Electricity and circuits:-- Electric cell, A bulb connected to an electric cell, An electric circuit, Electric switch., Electric conductors and insulators.

Fun with magnets:--How magnets were discovered?, Magnetic and non magnetic materials, Poles of magnet, Finding directions, Make your own magnet, Attraction and repulsion between magnets, A few cautions.

Air around us:-- Is air present everywhere around us? What is air made up of? How does oxygen become available to animals and plants living in water and soil? How is the oxygen in the atmosphere replaced?

Nutrition in plants:-- Mode of nutrition in plants (Photosynthesis and other modes) , How nutrients are replenished in the soil.

Nutrition in animals:-- Different ways of taking food, Digestion in human , grass eating animals, amoeba.

Heat:-- Hot and cold, Measuring temperature, Transfer of heat, Kinds of clothes we wear in summer and winter.

Acids, Bases and Salts:-- Acids and Bases, Natural indicators around us (litmus, turmeric ,china rose), Neutralization (In everyday life Indigestion, ant bite, soil treatment , factory waste).

Physical and Chemical Changes:-- Physical change, Chemical change, Rusting of iron, Crystallization.

Respiration in Organisms:-- Why do we respire? , Breathing, How do we breathe? , What do we breathe out? , Breathing in other animals (Cockroach, Earthworm), Breathing under water, Do plants also respire?

Reproduction in Plants:--Seed Dispersal

Motion and Time:-- Slow or Fast, Speed, Measurement of time, Measuring speed, Distance- Time Graph

Electric Current and its Effects:-- Symbols of Electric Components, Heating Effect of Electric Current, Magnetic Effect of Electric Current, Electromagnet, Electric Bell.

Light:-- Light travels along a Straight Line, Reflection of Light, Spherical Mirrors , Lenses, Sunlight- White or coloured?

Forests: Our Lifeline, Waste Water Story, Water our lifeline, What is sewage, Water freshens Up- An Eventful Journey, Waste water Treatment Plant, Better Housekeeping Practices, Sanitation and Disease, Alternative Arrangement for Sewage Disposal, Sanitation at public places.

Crop Production and Management:-- Agricultural Practices (Preparation of soil, Sowing, Adding manure and Fertilisers, Irrigation, Protecting from weeds, Harvesting, Storage).

Microorganisms: Friend and Foe:-- Microorganisms, Where do microorganisms live? , Microorganisms and us, Friendly microorganisms, Harmful microorganisms, Food preservation, Nitrogen fixation, Nitrogen cycle.

Coal and Petroleum:-- Natural resources (Exhaustible and Inexhaustible) , Story of Coal, Petroleum, Refining of petroleum, natural gas.

Combustion and Flame:-- What is combustion?, How do we control fire ? , Types of combustion, Flame, Structure of a flame, What is the fuel? , Fuel

efficiency, burning of fuel leads to harmful products (Global warming, Acid rain, Incomplete combustion, Deforestation).

Conservation of Plants and Animals:--Deforestation , its causes and consequences, Conservation of forest and wildlife, National Park, Wildlife Sanctuary, Biosphere Reserve, Flora and fauna, Endemic species, Red Data book, Migration, Recycling of paper, Reforestation.

Reproduction in Animals:-- Modes of reproduction, (Sexual and Asexual), Story of Dolly, the clone, Oviparous and viviparous animals, Metamorphosis, IVF

Reaching the age of Adolescence:-- Adolescence and puberty, Changes at puberty, Secondary Sexual characters, Role of hormones, Reproductive phase of life in humans, How is the sex of baby determined? , Reproductive health, Say no to drugs.

Force and Pressure:-- Forces are due to an interaction, Exploring forces, Contact forces (Muscular , friction) ,Non contact forces (Magnetic, electrostatic, gravitational), Pressure exerted by liquids and gasses, Atmospheric pressure.

Friction:-- Factors affecting friction, Friction : A necessary Evil, Increasing and reducing friction, Fluid friction, Static, sliding and rotating friction.

Sound: Production of sound, Sound needs a medium for propagation, Song produced by Humans, Human ear, Amplitude, time period and frequency of a vibration, Loudness and pitch, Audible and inaudible sounds, Noise and music, noise pollution. Harms of noise pollution, Measures to limit noise pollution, Hearing impairment.

Chemical Effects of Electric Current:-- Do liquids conduct electricity? , Electroplating.

Some Natural Phenomena:-- Lightning, The sparks that the Greeks knew about, Charging by rubbing, Types of charges and their interaction, Transfer of charge, The story of Lightning, Lightning safety. Earthquake, Protection against earthquake.

Light:-- What makes things visible?, Laws of reflection, Regular and Diffused reflection, Reflected light can be reflected again, Multiple images, Kaleidoscope, sunlight, white or coloured , what is inside our eyes , Care of the eyes, Visually impaired persons can read and write, What is the Braille system?.

Matter in Our Surroundings: States and properties of matter; Elements, compounds, mixtures, and solutions; Atoms and Molecules: Laws of chemical combination, chemical formulae, and atomic masses; Structure of the Atom: Subatomic particles, atomic models, and isotopes;

The Fundamental Unit of Life: Cell structure, organelles, and cell division; Tissues: Plant and animal tissues and their functions; Improvement in Food Resources: Crop and animal farming methods for better yield and quality.

Motion: Distance, displacement, speed, velocity, and graphs of motion; Force and Laws of Motion: Newton's laws, inertia, and momentum; Gravitation: Universal Law of Gravitation, mass, weight, and Archimedes' Principle; Work and Energy: Work, kinetic energy, potential energy, and the Law of Conservation of Energy; Sound: Production, propagation, characteristics, and reflection of sound

Chemical Reactions and Equations, Acids, Bases, and Salts, Metals and Non-Metals, Carbon and Its Compounds; Life Processes, Control and Coordination, Reproduction in Organisms, Heredity and Evolution, Light – Reflection and Refraction, The Human Eye and the Colourful World , Electricity, Magnetic Effects of Electric Current, our environment.

IV. ENGLISH

Reading Comprehension Word Power, The Sentence, Subject And Predicates , Articles, Number, Gender, Punctuation, Comprehension, Noun, Pronoun, Verb, Finite and Non-finite Verb, Adverb, Adjective, Preposition, Conjunction, Interjection , Error Correction, Sentence Rearrangement, Vocabulary, Antonym, Synonym, Tenses, Subject-Verb Agreement , Idioms, Modal, Active Voice & , Passive Voice, Change the narration-Direct and Indirect , Phrases and a Clauses , One word substitution, Transformation of Sentences.

v. हिन्दी

भाषा—व्याकरण एवं लिपि का परिचय वर्ण विचार एवं आक्षरिक खण्डय शब्द विचार ;कद्ध परिभाषा के आधार पर ;तत्सम्, तद्भव, देशज, विदेशीद्धए रचना के आधार पर, प्रयोग के आधार पर, अर्थ के आधार पर।

(ख) विकारी—संज्ञा, सर्वनाम, क्रिया, विशेषणय अविकारी—क्रिया—विशेषण, सम्बन्ध बोधक, समुच्चय बोधक, विस्मयादि बोधकय पद परिचय य शब्द शक्तियांय शब्द रूपान्तर—लिंग, वचन, कारक, काल, वाच्यय संधिय समासय उपसर्गय प्रत्यय य वाक्य विचार , अर्थ विचार ;पर्याय, विलोम, वाक्यों के लिए एक शब्द, समानार्थीद्धय विराम चिन्हय शुद्धिकरण ;शब्द शुद्धि, वाक्य शुद्धिद्धय मुहावरे एवं लोकोक्तियांय अलंकार।

VI SYLLABUS OF JBT COURSE /D.EL.ED COURSE

i. **Understanding the Psychology of Children:**

Perspectives of Psychology in Education, Growth and Development, Family and Adult Child Relationship, Humanistic Psychology and Developmental Theory, Intelligence, Creativity, Personality, Learning, Memory and Forgetting, Guidance and Counseling.

ii. **Education in Contemporary Indian Society:**

India-Emergence from Freedom Struggle, Constitution of India and Education, Democracy in India, Indian Economy.

iii. **Education, Society, and Curriculum:**

Philosophical Understanding of Education, Sociological Bases of Education: Education for Peace, Human Rights, Child Rights, Knowledge and Curriculum.

iv. **Pedagogy across the Curriculum:**

Knowledge and Methods of Inquiry, ICT: Usage in Developing Capacities, Pedagogic Practice and the Process of Learning, Teaching Proficiency.

v. **Teaching of the English Language:**

Nature of the English language, Language Skills: Listening and Speaking Skills, Reading and Writing Skills, Lesson planning and learner assessment, Issues of Teaching of English at the Elementary Stage, Approaches to the Teaching of English, Planning and Resources in Teaching of English, Learner Assessment.

vi. **हिन्दी भाषा शिक्षण**

भाषा, भाषा कौशल एवम् हहन्दी हशक्षण में अहिगम संसािन, भाषा हशक्षण एवं पाठ योजना, भाषा में मापन एवं मूल्ांकन, ह ंतन-कौशल,हहंदी भाषा एवं समसामहयकता, पाठ्यक्रम एवं भाषा हशक्षण, हहन्दी भाषा में मूल्ांकन एवं मापन।

vii. **Teaching of Mathematics**

Perspective about Mathematical Knowledge, Pedagogical Content Knowledge, Aspects of teaching mathematics, Assessment. Mathematical Reasoning and Algebra thinking, Mathematical Reasoning and Algebra thinking, Geometric ways of looking at Space and Shapes, Communicating Mathematics and Evaluation.

viii. **Teaching of Environmental Studies**

Concept of Environment Studies, Understanding Children's Ideas, Planning and Classroom Transaction, Assessment.

ix. **Children's Physical and Emotional Health, School Health and Education**

Understanding Health and Well-Being, Understanding Children's Health Needs, Health of Children in the Context of School, Concept and importance of Physical Education. Knowledge and Skills Development for Health Education, Communicable and Non-Communicable Diseases, Understanding Emotional Health Needs, Diversity and Inclusion, Contemporary Lifestyle and Stress Management.

x. **Creative Drama, Fine Arts, and Education**

Understanding Art and Art Education, Visual Arts, Crafts and Performing Arts, Planning and organization of Art Experience, Evaluation in Art Education. Understanding Arts and Arts in Education, Visual Arts, Crafts and Performing

Arts, Planning and organization of Art Experience, Evaluation of Art- integrated learning.

xi. **Work Education**

Concept and Importance of Work Education, Work Education Activities and Community, Organization and Management of Work Education, Evaluation in Work Education.

xii. **Teacher Identity, School Culture and Leadership**

Developing a vision of Education, Research Skills and Leadership, School organization and Management, Change facilitation in Education.

xiii. **Diversity, Gender and Inclusive Education**

Inclusive Education, Children with Special Needs, overcoming exclusion and promoting inclusion, Gender, School and Society.

xiv. **Science Education**

Understanding science and children's ideas in science, Learning Resources, Organization and Management, Classroom Transaction & Evaluation.

xv. **Social Science Education**

Nature of Social Sciences, Important Concepts of Social Sciences, Children's Understanding and Teaching-Learning Materials, Lesson planning, Pedagogy and Assessment.