18. Parliamentary privileges and immunities.
19. Amendment of the Constitution.

II. International Law

1. Nature of International Law.
2. Sources: Treaty, Customs, General Principles of Law recognised by civilized nations, subsidiaries means for the determination of Law, Resolutions of International organs and regulation of International organs and regulations of Specialized Agencies.
3. Relationship between International Law and Municipal Law.
4. State Recognition and State Succession.
5. Territory of States; modes of acquisition.
6. Sea. Inland waters. Territorial Sea. Contiguous Zone. Continental Shelf. Exclusive. Economic Zone and ocean beyond national Jurisdiction.
7. Air-space and aerial navigation.
8. Outer-space. Exploration and use of outer space.
9. Individuals, Nationality, Statelessness; Human Rights and procedures available for their enforcement.
10. Jurisdiction of States; bases of jurisdiction.
11. Extradition and Asylum.
12. Diplomatic Missions and Consular Posts.
13. Treaties ; Formation, application and termination.
14. State Responsibility,
15. United Nations : its principal organs, powers and functions.
16. Peaceful settlement of disputes.
17. Lawful recourse to force ; aggression, selfdefence. intervention.
18. Legality of the use of nuclear weapons.

Part-II

I Law of Crimes

1. Concept of crime : actus reus, mens rea, mens rea in statutory offences, punishments mandatory sentences preparation and attempt.
2. Indian Penal Code

a) Application of the Code
b) General exceptions.
c) Joint and constructing liability.
d) Abetment.
e) Criminal conspiracy.
f) Offences against the State.
g) Offences against public tranquility.
h) Offences by or relating to public servants.
i) Offences against humany body.
j) Offences against porperty.
k) Offences relating to Marriage : Cruelty.
l) Defamation.

II. Law of Torts.

1. Nature of tortious liability.
2. Liability based upon fault and strict liability.
3. Statutory liability.
4. Vicarious liability.

5. Joint Tort–fessors.
6. Remedies.
7. Negligence.
8. Occupier's liability and liability in respect of structures.
9. Defamation.
10. Nuisance.
11. Conspiracy.
12. False Imprisonment and Malicious Prosecution.

III Law of Contracts and Mercantile Law.

1. Formation of contract. (Indian Contract Act, 1872)
2. Factors vitiating consent.
3. Void, voidable, illegal and unenforceable agreements.
4. Performance of contracts.
5. Dissolution of contractual obligations, frustration.
6. Quasi-contracts.
7. Remedies for breach of contract.
8. Sale of goods and hire purchase (Sales of Goods Act, 1930).
9. Agency.
10. Formation and dissolution of Partnership (Indian Partnership Act,1932)
11. Negotiable Instruments.
12. The Consumer Protection Act, 1986.

IV Law of Evidence and Indian Evidence Act.

Note: Neither bare Act will be provided nor the candidates are allowed to bring a copy of any bare Act in the examination hall.

14. MATHEMATICS

Part - I

1. Linear Algebra

Vector space, Linear dependance and independance, Sub spaces, Bases, Dimensions, Finite dimensional vector spaces.

Matrics, Cayley-Hamilton theorem, Eigenvalues and Eigenvectors, Matrix of linear transformation, Row and column reduction, Echelon form, Equivalence, Congruence and Similarity, Reduction to Canonical form, Rank, Orthogonal, symmertrical, Skew Symmetrical, Unitary, Hermitian Skew-Hermitian forms–their given values. Orthogonal and Unitary reduction of quardratic and Hermition forms, Positive definite quadratic forms, Simultaneous reduction, Sylvester's law of inertia.

2. Calculus

Real numbers, Limits, Continuity, Differentiability, Mean-value Theorems, Taylor's theorem with remainders, Indeterminate forms, Maxima and Minima, Asymptotes, Functions of several variables, Continuity, Differentiability, Partial derivatives,Maxima and Minima, Lagrange's method of Multipliers, Jacobian, Riemann's definition of Definite integrals; Indefinite integrals, infinite and improper integral, Double and triple integrals (techniques only). Repeated integrals, Beta and Gamma functions. Areas, Surface and Volumes, Centre of Gravity.

3. Geometry

Cartesian and Polar coordinates in two and three dimension, Second degree equations in two and three dimensions, Reduction to Cannonical forms, Straight lines, Plane, Sphere, Cone, Cylinder, Paraboloid, Ellipsoid, Hyperboloid of one and two sheets and their properties. Shortest distance between two skew lines, Curves in space, Curvature and torsion. Serret-Frenet's formulae.

4. Ordinary Differential Equations

Formation of differential equations, Order and Degree, Equations of first order and first degree, Integrating factor, Equations of first order but not of first degree, lairaut's equation, singular solution. Higher order linear equations with constant coefficients. Complementary function and particular integral. General solution. Euler-Cauchy equation.

Second order linear equations with variable coefficients. Determination of complete solution when one solution is known. Method of variation of parameters.

5. Statics

Equilibrium of a system of particles, work and potential energy. Friction, Common Catenary, Principle of Virtual work, Stability of Equilibrium, Equilibrium of forces in three dimensions. 'Lemi's theorem'.

6. Dynamics

Degree of freedom and constraints, Rectilinear motion, Simple Harmonic motion. Motion in a plane, Projectiles. Constrained Motion, Work and energy, Conservation of energy, Motion under Impulsive forces, Kepler's laws, Orbits under Central forces, Motion of varying mass, Motion under resistance.

7. Hydrostatics

Pressure of heavy fluids. Equilibrium of fluids under given system of forces, Centre of pressure, Thrust on curved surfaces, Equilibrium of floating bodies. Stability of equilibrium. Metacentre, Pressure of gases, problems relating to atmosphere.

Part-II

1. Vector Analysis

Scalar and vector fields, triple products. Differentiation of Vector function of a scalar variable, Gradient, Divergence and Curl in Cartesian, Cylindrical and Spherical coordinates and their physical interpretation. Higher order derivatives. Vector Identities and Vector Equations, Application to Geometry, Gauss and Stoke's Theorems, Green's identities.

2. Real Analysis

Real number system, Ordered sets. Bounds, Ordered Field, Real number systems as an Ordered Field with least Upper Bound, Cauchy Sequence, Completeness. Completion Continuous Functions, Uniform Continuity. Properties of continuous functions on compact sets. Riemann Integral, Improper integrals. Differentiation of functions of several variables, Maxima and Minima, Absolute and conditional Convergence of series of real and Complex terms, Rearrangement of series, Uniform convergence, Infinite Products. Continuity, differentiability and integrability for series, Multiple integrals. Infinite and alternating series.

3. Numerical Analysis

Numerical Methods : Solution of algebraic and transcendental equations of one variable by bisection, Regula-falsi and Newton-Raphsons methods. Solution of system of linear equations by Gaussian elimination and Gauss-Jordan (direct) methods. Gauss Seidel (iterative) method.

Interpolation : Nedwton's (forward and backword) and Lagrange's method.

4. Mechanics

Concepts of particles, Lamina, Rigid Body, Displacement, Force, Mass, Weight, Motion, Velocity, Speed, Acceleration. Parallelogram of forces. Parallelogram of velocity, acceleration, resultant, equilibrium of coplanar forces. Moments, Couple, Friction, Centre of mass, Gravity. Laws of motion. Motion under conservative forces. Motion under gravity. Projectile, Escape velocity; Motion of artificial satellites.

5. Probability

Sample space, Events, Algebra of events, Probability–Classical, Statistical and Axiomatic Approaches. Conditional Probability and Baye's Theorem Random Variables and Probability. Distributions–Discrete and Continuous. Mathematical Expectations. Binomial, Poisson and Normal Distributions.

6. Statistical Methods

Collection, Classification, tabulation and presentation of data. Measures of central value. Measures of dispersion. Skewness, moments and Kurtosis. Correlation and regressiion.

15. MECHANICAL ENGINEERING

Part-I

1. Theory of machines

Kinematic and dynamic analysis of planar mechanisms. Cams, Gears and gear trains. Flywheels, Governors, Balancing of rigid rotors. Linear vibration analysis of mechanical system, (single degree and two degrees of freedom). Critical speeds and whirling of shafts. Automatics controls. Belt and chains drives.

2. Mechanics of Solids

Stress and strain in two dimensions. Principal stresses and strains. Mohr's circle, linear elastic materials. Stress-strain relations, uniaxial loading, thermal stresses. Beams : Bending moment and shear force diagrams, bending stresses and deflection of beams. Torsion of shafts, helical springs. Combined stresses. Thick and thin walled pressure vessels. Struts and columns. Strain energy concepts and theories of failure.

3. Engineering materials

Basic concepts on structure of solids. Crystalline materials. Defects in crystalline materials. Alloys and binary phase diagrams. Properties of common engineering materials. Heat treatment of steels. Plastics, ceramics and composite materials, common applications of various materials. Corrosion. Powder Metallurgy.

4. Manufacturing Science

Merchant's force analysis. Taylor's tool life equation, machinability and machining economics. Rigid, small and flexible automation. NC, CNC. Recent machining methods–EDM, ECM and ultrasonics. Applications of lasers and plasmas. Jigs, fixtures, tools and gauges. inspection of length, position, profile and surface finish.

5. Manufacturing Management

Production planning and Control, Forecasting–Moving average, exponential smoothing, operations scheduling; assembly line balancing, Product development, Break-even analysis, Capacity planning, PERT and CPM. Control operations; Inventory control–ABC analysis. Basic EOQ model, Materials requirement planning, Job Design, Job standards. Work measurement. Quality Management–Quality analysis and control statistical quality control.

Value Engineering : Value analysis, for coat/value, Just in Time (JIT) technique, Enterprises Resources Planning (ERP). Total quality management . Project management.

Part-II

1. Thermodynamics

Basic concept, Open and closed systems, Applications of Thermodyanamic Laws. Gas equatiions, Clapeyron equation. Availability, Irreversibility.

2. C.I. Engines, Fuels and Combustion

Spark Ignition and compression Ignition engines, Four stroke engine and Two-stroke engines, Mechanical, thermal and volumetric efficiency, Heat balance sheet, combustion process in S.I. and C.I. engine, Choice of engine fuels, Octane and Cetane ratings, Alternate fuels. Carburration and Fuel injection. Solid, liquid and gaseous fuels, stoichometric air requirements and excess air factor, higher and lower calorific values.

3. Heat Transfer, Refrigeration and Air Conditioning

One dimensional heat conduction. Heat transfer from extended surfaces, Heat transfer by forced and free convection, Heat exchangers. Fundamentals of diffusive and convective mass transfer, Radiation laws, heat exchange between black and non-black surfaces, Network Analysis, Heat pump refrigeration cycles and systems, Condensers, evaporators and expansion devices and controls. Properties and choice of refrigerant, Refrigeration systems and components psychrometrics, cooling load calculations, solar refrigeration.

4. Turbo-Machines and Power Plants

Theory and design of axial flow turbines and compressors. Flow through turbo-machine blade, cascades, centrifugal compressors. Dimensional analysis and modelling, selection of site for steam, hydro, nuclear and stand-by power plants, selection, base and peak load power plants. Modern High pressure, High duty boilers, station and plant heat rates, operation and maintenance of various power plants, preventive maintenance, economics of power generation.

16. PHYSICS

Part-I

1. Mechanics

Conservation Laws, collisions, impact parameter, scattering cross-section, centre of mass . Rutherford Scattering. Motion of a rocket under constant force field Rotating frames of reference. Coriolis force, motion of rigid bodies. Angular momentum. Torque and procession of a top. Central forces, Motion under inverse square law, Kepler's Laws, motion of satellites (including geostationary). Galilean Relativeity, Special Theory of Relativity, Mischelson-Morley Experiement, Lorentz transformation-addition theorem of velocities. Variation of mass with velocity. Mass-Energy equivalence. Fluid dynamics, streamlines, turbulance, Barnoulli's Equation with simple applications.

2. Thermal Physics

Laws of thermodynamics, entropy, Carnot's cycle, isothermal and adiabatic changes. Thermodynamic Potentials Maxwell's relations. The Clausius–Clapeyren equation reversible cell. Joule-Kalvin effect etc. Kinetic theory of gases. Maxwell's distribution law of velocities. Equipartition of energy, Specific heats of gases, mean free path. Brownian motion, black body radiation. Specific heat of solids-Einstean & Dabye theories. Wein's law, Planck's law solar constant.

3. Waves and Oscillations

Oscillations. Simple harmonic motion. Stationary and travelling waves. Damped harmonic motion. Forced oscillation and Resonance. Wave equation. Harmonic solutions. Plane and spherical waves. Superposition of waves, Phase and group velocities. Beats. Hygen's principle Interference. Diffraction Fresnel and Fraunhofer. Diffraction by single slits. Resolving power of grating and optical instruments. Rayleigh Criterion. Laser sources (Ruby). Holography, theory and and applications.

Part-II

1. Electricity & Magnetism

Coulomb's Law, electric field. Gauss's Law, Electric Potential Poission and Laplace equations for a homogeneous dielectric uncharged conducting sphere in a uniform field. Point charge and infinite conducting plane. Magnetic shell, Magnetic induction and field strength. Blot-Savart law and applications, electromagnetic induction. Faraday's and Lenz's laws, Self and mutual inductances. Alternating currents. L.C.R. circuits series and parallel resonance circuits, quality factor. Kirchoff's laws with application. Transverse nature of electromagnetic waves. Poynting vector. Magnetic fields in matter–dia, para, ferro antioferro and ferri magnetism (qualitative approach only).

2. Modern Physics

Raman effect. Photo-electric effect. Compton effect. Debrogilee waves. Wave particle quality and uncertainty principle. Schrodinger wave equation with application to (i) particle in a box. (ii) Bohr's theory of H-atom, calculation of e/m ratia and charge on e^-. Principle radioactivity. Alpha, beta and gamma radiations. Elementary theory of the alpha decay. Nuclear binding energy. Nuclear fission and fusion. Elementary reactor physics. Elementary particles and their classification. Strong and weak electromagnetic interactins. Particle accelerators; cyclotron. Elementary ideas of superconductivity.

3. Electronics

Band theory of Solids–Conductors, insulators and semiconductors; intrinsic and extrinsic semiconductors, P-N junction. Zenner diodes reverse and forward biased P-N junction, use of diodes and transistors for rectification, amplification and oscilliation, Logic Gate (AND, OR, NOT).

17. POLITICAL SCIENCE AND INTERNATIONAL RELATIONS

Part-I

Political Theory

1. General characteristics of Western political thought.Plato, Aristotle, Machiavelli, Hobbes, Locke, Montesquieu, Rousseau, Bentham, J.S. Mill, T.H. Green, Hegel, Marx, Lenin , Mao-se Tung.

2. Nature and scope of political science. Significance of political theory. Elite and theories of Elite. Growth of political science as a discipline. Traditional vs. contemporary approaches. Behaviouralism and post behavioural developments. System theory and other recent approaches to political analysis. Marxist approach to political analysis. Power, authority and legitimacy. Different dimension of power. Theories of power in society.

3. The emergence and nature of the modern state. Sovereignty. Monistic and pluralistic analysis of sovereignty. Dominant perspectives of modern state : alternate perspectives. Political culture and political socialization. Political participation and political communication. Modernisation and political development. Alienation and theory of Alienation. National building and national integration. Social conflict and revolution.

4. Political obligation. Resistance and revolution. The concepts of freedom, liberty, equality, rights, property, justice, Human rights and gender issues. Theories of distributive justice. Notions of common good. Consumer protection with special reference to India.

5. Democracy and political participation. Dominant theories of democracy. Political process and social change. Theories of social change–revolutionary change. Concepts of development, socialist, liberal, Gandhian and others. Critics of development modal, the debate on welfare state. Development and environment–the contemporary debates.

6. Liberalism, evolutionary socialism (democratic and fabian). Marxian socialism, Fascism.

Government and politics with special Reference to India

1. Approaches to the study of comparative politics. Study of Western and non-western perspectives.

2. Political institutions. The legislature, executive and judiciary. Parties and pressure groups. Theories of party system (Lenin, Michels and Duverger). Electoral system. Bureaucracy–Weber's view and modern critiques of Weber.

3. Indian Political System : (a) The Roots, colonialism and nationalism in India. A general study of modern Indian social and political thought of Raja Rammohan Roy, Dadabhai Nauroji, Gokhale, Tilak, Sri Aurobindo, Iqbal, Jinnah, Gandhi, B.R. Ambedkar, M.N. Roy, Nehru, Vinobha Bhave and Jai Parkash Narain.

(b) The structure – Basic features of Indian Constitution, Fundamental Rights and Directive Principles, Union Government, Parliament, Cabinet, Supreme Court and Judicial Review, Indian Federalism, Centre-state relations, State Government, Role of the Governor, Panchayati Raj institutions.

(c) The Functioning–class and caste in Indian politics. Politics of regionalism, linguism and communalism. Problem of secularization of the policy and national integration. Political elites, the changing composition. Political parties and political participation. Pressure groups. Public opinion. Voting behaviour and electoral process. Ethnicity. Planning and developmental administration. Socio-economic changes and its impact on Indian democracy.

Part-II

1. Nature and concepts of international politics. Functioning of the sovereignation state system; cold war and neo-cold war–its origin, end and impact on global politics. Power. National interest. Balance of power. Power vacuum.

2. Theories of international politics : The realist theory, System theory, Critical theories etc.

3. Foreign policy determinants and choices. National interest. Ideology. Elements of national power (including nature of domestic social-political institution). Imperialism. Balance of power. Allegiances. Isolationalism. Nationalistic universalism (Pax Britiannica, Pax Americana, Pax Sovietica), The Middle Kingdom complex of China, Non-alignment.

4. Non-alignment movement. Its meaning and basis. Its role in international relations. De-colonization and expansion of the international community. Neo-colonialism and facialism, their impact on international relations.

5. International economic order : Aid, trade and economic development. The struggle for the new international economic order. Sovereignty over natural resources. The crisis in energy resources. Global politics of environment. Role of IMF, World Bank, WTO, ADB and North South Dialogue.

6. Origin and development of international organisations. The United Nations and specialized agencies and their role in international relations.

7. Role of Regional organisations : OAS, OAU, the Arab League, the ASEAN. EU, APEC, SAARC, NAFTA etc.

8. Arms race, disarmament and arms control. Conventional and nuclear arms. Proxy wars and problem of terrorism. The Arms trade, its impact on Third world and its role in international relations. The uses and mis-uses of nuclear energy. The impact of nuclear weapons on international relations. The Partial Test ban Treaty. The Nuclear Non-Proliferation Treaty (NPT), Peaceful Nuclear Explosions (PNE) and CTBT.

9. Theory and practice of diplomacy. External intervention : Ideological, political and economic. Cultural imperialism. Covert intervention by the major power.

10. The problems and prospects of the Indian Ocean being made a peace-zone and emerging cooperation under IOR–ARC and the conflict situation in West Asia.

11. The post-war foreign policies of the major powers viz., United States, Soviet Union, China.

India and the World

1. Determinants and making of India's foreign policy.

2. India's policy of non-alignment and its contribution through NAM.

3. India's relations with major powers : USA, USSR, Russia, Japan, EU.

4. India and its neighbours : China, Pakistan, Bangladesh, Sri Lank and Nepal.

5. Conflict and cooperation in South and Southeast Asia : Major conflicts, SAARC, ASEAN, ARF, IOR-ARC.

6. India's foreign economic policy, globalization and changing world order; India and poeple of Indian origin.

7. India's concerns for nuclear proliferation and peace. PTBT, NPT, PNE, CTBT, UN Peace-Keeping and global disarmament.

8. Changing global environment and assessment of India's foreign policy.

18. PSYCHOLOGY

Part-I : Foundations of Psychology

1. Scope and Methods of Psychology

Relation of psychology with sociology and anthropology. Methods of psychology-observation, interview, questionnaires, experimental methods, test methods, scales, case study. Methodological problems of psychology. General design of psychological research. Designs in experimental psychology.

2. Biological basis of Psychology : Nerves and synapes, transmission of neural impulses, synaptic transmission. Organisation of the nervous system. Division of nervous system – spinal cord, the brain. Hierarchical structure of the brain–central core, limbic system. Endocrine system in context of human behaviour. Central peripheral nervous system. Genetic influence on behavgiour–genetic laws of inheretance, the structure and functions of chromosomes. Reflex action. Localisation of functions in human cortex. Characteristics of sleep and arousal. Stages of sleep. Neural mechanism in sleep.

3. Perception

Meaning, kinds and determinants of attention and vigilance. Perception of form, colour, depth, distance, motion. Theories of colour, vision and hearing. Geometrical illusions (types and theories). Theories of perception. Perceptual organisaton. Person perception. Perceptual defence. Transactional approach to perception. Perception and personality. Figural after-effect. Perceptual styles, perceptical abnormalities.

4. Learning

Types of learning. Learning theories. Operant and Classical conditioning. Instrumental conditioning type (appetitive and aversive conditioning). Cognitive learning. Transfer of learning. Perceptual learning. Learning and motivation. Laws of learning. Factors influencing learning. Discrimination learning. Probability learning. Programmed learning.

5. Emotions and Stress

Characteristics of emotional behaviour. Expressions of emotions (emotional reactions). Physiological correlates of emotions. Role of nervous system and endocrine glands in emotions. Theories of emotions : James Lange, Cannon Bard and Schachter. Stress – Stressors (causes of stress)–conflict, change, lack of control, unpredictibility. Coping with stress.

6. Memory

Nature of Memory. Methods of reproduction . Factors influencing memory. Stages of memory (encoding storage and retrieval). Theories of memory. Short-term memory. Longterm memory. Measurement of memory. Forgetting reminscence. Theories of forgetting. Causes of forgetting.

7. Thinking

Nature and elements of thinking. Images and thinking. Language and thinking. Concept formatiion. Creative thinking. Deductive and Inductive reasioning. Problem solving–Nature and scientific methods of problem solving.

8. Intelligence and Aptitude

Nature of intelligence. Theories of intelligence. Measurement of intelligence. Measurement of creativity. Constancy of I.Q. Aptitude. Measurement of aptitudes. The concept of social intelligence. Types of intelligence and aptitude tests.

9. Motivation

Concept of need, drive, arousal and incentive. Characteristics of motivated behviour. Classification of motives. Extrinsic versus intrinsic motivation. Theories to motivation: psycho-analytic theory, drive theory, need hierarchy theory, vector valence theory. Concept of level of aspiration. Measurement of motivation. The apathetic and the alienated individual. Incentives.

10. Personality

The concept and nature of personality. Development of self, culture and personality. Trait and type approaches. Determinants of personality. Theories of personality: Freud, Allport, Murray, Cettell. The Indian approach to personality–the concept of gunas. Measurement of personality: Subjective techniques, objective techniques and projective techniques.

11. Attitudes and Values

Definition of attitudes. Measurement of attitudes. Characteristics formation and development of social attitude. Theories of attitudes. Balance and cognitive dissonance theory. Attitude measurement. Theories of attitude change. Values. Types of values. Motivational properties of values. Measurement of values.

12. Development of Human Behaviour and Socialization

Effect of heredity, environment and cultural factors on behaviour. Nature, agencies and factors of socialization. Meaning, characteristics and formation of social norms. Meaning and determinants of social roles. Meaning and types of social status.

13. Statistics in Psychology

Frequency distribution. Graphical representation of data. Histogram and polygon. Uses of mean, median, mode. Measures of central tendency variability. Standard deviation. Correlation and its use in psychology. Percentile and percentile ranks. Method for ungrouped data.

Part-II : Issues and Applications of Psychology

1. Individual Differences

Psychological Tests and General Mental ability (intelligence). Types of psychological tests. Characteristics of a good psychological tests (s). Limitation of psychological tests. General mental ability (intelligence)–nature and theories of intelligence : Spearman, Thurston, Guilford, Jensen and Piaget. Heritability of intelligence.

2. Classification of Psychological Disorders

Classifying psychological disorders. Emperical approachs to classification : DSM system of classification. Recuring issues in classification.

3. Abnormal behaviour

Psychological disorders. Concept of normalcy and abnormalcy. Causes of abnormal behaviour–biological, psychological and socio–cultural. Structural aspect of Freudian theory and defence mechanism.Neurosis–symptoms, aetiology and treatment. Phobic disorder, obsessive compulsive disorder, anxiety disorder, conversion disorder, disossiative disorder. Psychosomatic disorders–hypertension and peptic ulcers. Psychotic disorders – symptoms, aetiology and treatment. Functional Psychosis–depressive disorders, manic depressive psychosis, schizophrenia. Drug abuse – alchohal, narcotics, stimulants (amphetamines), hallucinogens (LSD), marijuana (hashish). Methods of assessing abnormal behaviour.

4. Therapeutic Approaches (Treatment of Abnormalcy).

Psychoanalysis. Behaviour therapy. Client centered therapy. Cognitive therapy. Group therapy. Chemotherpy–Anti-psychotic drugs, Anti-anxiety drugs. Anti-depressent drugs. ECT.

5. Application of Psychology to Organisational and Industrial settings.

Personnel selection. Training. Work motivation. Job satisfaction. Worker's participation in management.

6. Groups

Nature, types and functions of group. Crowd, mob and audience. The concept of small group. Properties of groups. Theories of group behaviour. Measurement of group behaviour. Interpersonal relations. Leadership–Nature, types, qualities, functions. Theories of leadership (Trait theory, complex strait theory, interactional theory).

7. Social Change

Nature and characteristics of social change. Factors and theories of social change. Psychological basis of change. Steps in the change process. Resistance to change. Factors contributing to resistance. Planning for change. The concept of change-proneness. Meaning of social perception. Nature and importance of stereo-types. Nature, factors and theories of propaganda.

8. Psychology and the Problem of Social Integration

The problem of ethnic prejudice. Nature of prejudice. Manifestations of prejudice. Development of prejudice. Measurement of prejudice. Amelioration of prejudice. Prejudice and personality. Steps to achieve social integration.

9. Problems of Contemporary Society

Alcoholism and drug addiction. The socially deviant juvenile delinquency. Crime rehabiliation of the deviant. The problems of the aged.Success and failure of marriage. Divorce, separation. Parental fixation. Sibling rivalary. Special needs children (mentally retarded, blind, orthopaedically and hearing handicapped etc.). Approaches in dealing with them. Their physical, social, psychological and educational problems.

19. PUBLIC ADMINISTRATION

Part-I Administrative Theory

I. Basic Premises : Meaning, scope and significance of Public Administration. Private and Public Administration. Its role in developed and developing societies. Ecology of administration – social, economic, cultural, political and legal. Evolution of Public Administration as a discipline. Public Administration as an art and a science. New Public Administration.

II. Theoriess of Organisation : Classical theory of Organisations (Henri Fayol, Luther Gulic and Others). The Human Relations Theory of Organisations (Elton Mayo and his dolleagues). Behavioural approach. Systems approach. Organizational effectiveness.

III. Principles of Organization : Hierarchy. Unity of command. Authority and responsibility. Coordination. Span of control/supervision. Span control of coordination. Supervision and control. Centralization and decentralization. Delegation. Communication public relations – meaning, methods and significance.

IV. Administrative Behaviour : Decision making with special reference to the contribution of Herbert Simon. Theories of leadership. Communication. Morale. Motivation.

V. Structure of Organisations : Chief Executive. Types of Chief Executives and their functions. Line, staff and auxiliary agencies. Forms of administrative organisation. Departments, corporations, companies, boards and commissions. Independent regulatory commissions. Headquarters and field relationship.

VI. Personal Administration : Bureaucracy and civil services. Position classification. Recruitment. Training. Career development. Performance appraisal. Promotion. Pay and service conditions. Retirement benefits. Discipline. Employer-employee relations. Integrity in administration. Generalists and specialists. Neutrality and anonymity. Public Service Commission. Morale. Joint consulative machinery (white councils).

VII. Financial Administration : Concept of budget. Principle of budget making. Preparation, passing and execution of budget. Performance budgeting. Legislative control. Accounts and audit. Significance of audit. Parliamentary control over public finance.

VIII. Accountability and Control : The concepts of accountability and control. Legislative, executive and judicial control over administration. Parliamentary and government control over public corporation. Citizen and administration.

IX. Administrative Reforms : O & M. Work study. Work measurement. Administrative reforms. Processes and obstacles.

X. Administrative Law : Importance of administrative law. Delegated legislation – meaning, types, advantages, limitations and safeguards. Administrative tribunals.

XI. Comparative and Development Administration : Meaning, nature and scope of comparative public administration. The concept, scope and significance of development administration. Political, economic and socio-cultural context of development administration. The concept of administrative development.

XII. Public Policy : Relevance of policy making in public administration. The processes of policy formulation and implementation.

Part-II Indian Administration

I. Evolution of Indian Administration : Kautilya, Mughal period and British period. Features of Indian administration, its role in the context of democratic system and socio economic development.

II. Environmental Setting : Constitution. Parliamentary democracy. Federalism. Planning. Socialism.

III. Political Executive at the Union Level : President. Prime Minister. Council of Ministers. Cabinet Committees.

IV. Structure of Central Administration : Secretariat, Cabinet Secretariat, Ministries and Departments. Board and Commissions. Field organisations.

V. Centre-State Relations : Legislative. Administrative. Planning and financial.

VI. Public Services : All India Services. Central Services. State Services. Local Civil Services. Union and State Public Service Commission. Recruitment, training, promotion, discipline, morale of civil services.

VII. Machinery for Planning : Plan formulation at the national level. National Development Council. Planning Commission. Planning machinery at the state and district levels. State planning board. Preparation of Five Year Plans. Centre State relations regarding planning.

VIII. Public Undertakings : Forms, management, control and problems.

IX. Control of Public Expenditure : Preparation of Indian budget and its enactment. Parliamentary control over public finance in India. Role of the Finance Ministry. Role of Comptroller and Auditor General over financial administration. Composition and function of Public Accounts Committee and Estimates Committees at the centre.