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NOTIFICATION

No. A. 45011/1/2010-P&AR(GSW), the 5th August, 2013. In exercise of the powers conferred by the proviso to Article 309 of the Constitution of India and all other powers enabling him to do so on this behalf, the Governor of Mizoram is pleased to amend the Mizoram Civil Services (Combined Competitive Examination) Regulations, 2011 (hereinafter referred to as the Principal Regulations) which was notified under No.A.45011/1/2010-P&AR(GSW) dated the 3rd February, 2012 and published in the Mizoram Gazette extraordinary Issue No.59 dated the 9th February, 2012, namely:-

1. *Short title and commencement*
 - (1) These rules may be called the Mizoram Civil Services (Combined Competitive Examination) (Amendment) Regulations, 2013
 - (2) They shall come into force from the 1st January, 2014.
2. *Amendment of Regulation 3*
 - (1) In the Principal Regulations, sub-clause (3) (d) of clause (ii) of Regulation 3 shall be deleted.
 - (2) In the principal regulations, clause (vi) of Regulation (3) shall be substituted, namely :-
" All the successful candidates in the written examination will have to undergo Medical examination as contained in the schedule - II(A). The Medical examination shall be conducted before personal interview is held. Provided that the Medical Examination in respect of persons with disabilities will have to be conducted separately taking into account the nature of disabilities, in accordance with the provision of ' The Persons with Disabilities (Equal opportunities, protection of Rights and full participation) Act, 1995".
 - (3) In the Principal Regulations, clause (vii) of regulation 3 shall be deleted.
3. *Amendment of Regulation 9*
 - (1) In the Principal regulations, the entire provision of sub-clause (v) of clause (2) of Regulation 9 shall be deleted.
 - (2) In the Principal Regulations, sub-clause (vi), (vii) and (viii) of clause (2) of Regulation 9 shall be renumbered as sub-clause (v), (vi) and (vii) respectively.
4. *Amendment of Regulation 14*

In the Principal Regulations, after the last sentence of the first paragraph of Regulation 14(1), the following shall be inserted, namely :-

"Notification No.A.45011/1(1)/2012-P&AR(GSW) dated 5.6.2012 and of even No. dated 9.7.2012 and 9.11.2012 are also hereby repealed".

5. *Amendment of Schedule - I* (1) In the Principal Regulations, for the first paragraph under the heading A. PRELIMINARY EXAMINATION of Schedule-I, the following shall be substituted, namely :-
" The examination shall consist of 2(two) papers of objective types (Multiple Choice Questions and negative marking). Each paper shall carry a maximum of 200 marks of 2 hours duration.

Explanation :

1. There will be penalty (Negative Marking) for every answer given by a candidate in the objective type Question papers.
 2. For each Question for which a wrong answer has been given by the candidate, one third of the marks assigned to that Question will be deducted as penalty.
 3. If a candidate gives more than one answer to one Question, it will be treated as wrong answer even if the given answer happens to be correct and there will be same penalty as above for that Question.
 4. If any Question is left blank, i.e. no answer is given by the candidate, there will be no penalty for that Question."
- (2) In the Principal Regulations, for the syllabus of Geography, Home Science, Philosophy, Physics, Public Administration and Sociology under the sub-heading OPTIONAL SUBJECTS of heading B. MAIN EXAMINATION of Schedule-I, the following shall be substituted, namely :-

"GEOGRAPHY

PAPER - I
(Principles Of Geography)

SECTION - A
PHYSICAL GEOGRAPHY

- Unit-I : Geomorphology: process of landform development; endogenetic and exogenetic forces; Origin and evolution of the earth's crust; Fundamentals of geomagnetism; interior of the earth's; Geosynclines; Continental drift; Isostasy; Plate tectonics; Recent views on mountain building; Vulcanicity; Earthquakes and Tsunamis; Concepts of geomorphic cycles and Landscape development ; Denudation chronology; Channel morphology; Erosion surfaces; Slope development; Applied Geomorphology : Geohydrology, economic geology and environment.
- Unit-II : Climatology: Temperature and pressure belts of the world; Heat budget of the earth; Atmospheric circulation; atmospheric stability and instability. Planetary and local winds; Monsoons and jet streams; Air masses and fronto genesis, Temperate and tropical cyclones; Types and distribution of precipitation; Weather and Climate; Koppen's, Thornthwaite's and Trewartha's classification of world climates; Hydrological cycle; Global climatic change and role and response of man in climatic changes, Applied climatology and Urban climate.
- Unit-III : Oceanography: Bottom relief of the Atlantic, Indian and Pacific Oceans; Temperature and salinity of the oceans; Heat and salt budgets, Ocean deposits; Waves, currents and tides; Marine resources: biotic, mineral and energy resources; Coral reefs and tools, coral bleaching; sea-level changes; law of the sea and marine pollution.

Unit-IV : Biogeography: Genesis of soils; Classification and distribution of major soils; Soil profile; Soil erosion, Degradation and conservation; Factors influencing world distribution of plants and animals; Problems of deforestation and conservation measures; Social forestry; agro-forestry; Wild life; Major gene pool centres. Principle and concept of ecology; Human ecological adaptations; Influence of man on ecology and environment; Global and regional ecological changes and imbalances; Ecosystem their management and conservation; Environmental degradation, management and conservation; Biodiversity and sustainable development; Environmental policy; Environmental hazards and remedial measures; Environmental education and legislation.

SECTION - B Human Geography:

- Unit-I : Perspectives in Human Geography: Areal differentiation; regional synthesis; Dichotomy and dualism; Environmentalism; Quantitative revolution and locational analysis; radical, behavioural, human and welfare approaches; Languages, religions and secularisation; Cultural regions of the world; Human development index. Models, Theories and Laws in Human Geography: Systems analysis in Human geography; Malthusian, Marxian and demographic transition models; Central Place theories of Christaller and Losch; Perroux and Boudeville; Von Thunen's model of agricultural location; Weber's model of industrial location; Ostov's model of stages of growth. Heartland and Rimland theories; Laws of international boundaries and frontiers.
- Unit-II : Economic Geography: World economic development: measurement and problems; World resources and their distribution; Energy crisis; the limits to growth; World agriculture: typology of agricultural regions; agricultural inputs and productivity; Food and nutrition problems; Food security; famine: causes, effects and remedies; World industries: locational patterns and problems; patterns of world trade.
- Unit-III : Population and Settlement Geography: Growth and distribution of world population; demographic attributes; Causes and consequences of migration; concepts of over-under-and optimum population; Population theories, world population problems and policies, Social well-being and quality of life; Population as social capital. Types and patterns of rural settlements; Environmental issues in rural settlements; Hierarchy of urban settlements; Urban morphology: Concepts of primate city and rank-size rule; Functional classification of towns; Sphere of urban influence; Rural - urban fringe; Satellite towns; Problems and remedies of urbanization; Sustainable development of cities.
- Unit-IV : Regional Planning: Concept of a region; Types of regions and methods of regionalisation; Growth centres and growth poles; Regional imbalances; regional development strategies; environmental issues in regional planning; Planning for sustainable development.

GEOGRAPHY PAPER – II

***(Geography Of India)* SECTION - A**

Unit-I : Physical aspect and Resources: Space relationship of India with neighbouring countries; Structure and relief; Drainage system and watersheds; Physiographic regions; Mechanism of Indian monsoons and rainfall patterns, Tropical cyclones and western disturbances; Floods and droughts; Climatic regions; Natural vegetation; Soil types and their distributions. Land, surface and

- ground water, energy, minerals, biotic and marine resources; Forest and wild life resources and their conservation; Energy crisis.
- Unit-II : Agriculture: Infrastructure: irrigation, seeds, fertilizers, power; Institutional factors: land holdings, land tenure and land reforms; Cropping pattern, agricultural productivity, agricultural intensity, crop combination, land capability; Agro and social-forestry; Green revolution and its socio- economic and ecological implications; Significance of dry farming; Livestock resources and white revolution; aqua - culture; sericulture, apiculture and poultry; agricultural regionalisation; agro-climatic zones; agro- ecological regions.
- Unit-III : Industry: Evolution of industries; Locational factors of cotton, jute, textile, iron and steel, aluminium, fertilizer, paper, chemical and pharmaceutical, automobile, cottage and agro - based industries; Industrial houses and complexes including public sector undertakings; Industrial regionalisation; New industrial policies; Multinationals and liberalization; Special Economic Zones; Tourism including eco -tourism.
- Unit-IV : Transport, Communication and Trade: Road, railway, waterway, airway and pipeline networks and their complementary roles in regional development; Growing importance of ports on national and foreign trade; Trade balance; Trade Policy; Export processing zones; Developments in communication and information technology and their impacts on economy and society; Indian space programme.

SECTION - B

- Unit-I : Cultural aspect and Settlements: Historical Perspective of Indian Society; Racial, linguistic and ethnic diversities; religious minorities; major tribes, tribal areas and their problems; cultural regions; Growth, distribution and density of population; Demographic attributes: sex-ratio, age structure, literacy rate, work-force, dependency ratio, longevity; migration (inter-regional, intra-regional and international) and associated problems; Population problems and policies; Health indicators. Types, patterns and morphology of rural settlements; Urban developments; Morphology of Indian cities; Functional classification of Indian cities; Conurbations and metropolitan regions; urban sprawl; Slums and associated problems; town planning; Problems of urbanization and remedies.
- Unit-II : Regional Development and Planning: Experience of regional planning in India; Five Year Plans; Integrated rural development programmes; Panchayati Raj and decentralised planning; Command area development; Watershed management; Planning for backward area, desert, drought prone, hill, tribal area development; multi-level planning; Regional planning and development of island territories.
- Unit-III : Political Aspects: Geographical basis of Indian federalism; State reorganisation; Emergence of new states; Regional consciousness and inter state issues; international boundary of India and related issues; Cross border terrorism; India's role in world affairs; Geopolitics of South Asia and Indian Ocean realm.
- Unit-IV : Contemporary Issues: Ecological issues: Environmental hazards: landslides, earthquakes, Tsunamis, floods and droughts, epidemics; Issues relating to environmental pollution; Changes in patterns of land use; Principles of environmental impact assessment and environmental management; Population explosion and food security; Environmental degradation; Deforestation, desertification and soil erosion; Problems of agrarian and industrial unrest; Regional disparities in economic development; Concept of sustainable growth and development; Environmental awareness; Linkage of rivers; Globalisation and Indian economy.

Note : Candidates will be required to answer one compulsory map question pertinent to subjects covered by this paper.

**HOME SCIENCE
PAPER - I**

**SECTION – A
FAMILY RESOURCE MANAGEMENT**

- Unit-I : Concept of management, process of management. Motivating forces of management – Values, goals, standard and their interrelation.
Decision Making-types, steps, Works simplification. Principles.
Resources-types, characteristics; Time, energy and their management.
- Unit-II : Budgeting – steps in preparation, Account keeping, Savings and Investment, materials used in household Equipment.
- Unit-III : Housing – needs and problems of housing, important features of house planning.
Elements and principles of design and their application in Interior decoration, selection and arrangement of furniture and furnishing, flower arrangement-Principles, types.
- Unit-IV : Consumer Economics – Marketing types and function, Consumer rights and responsibilities, Consumer protection-standardization, protection laws. Quality Control, Labelling.

**SECTION - B
CLOTHING & TEXTILE**

- Unit-I : Classification and properties of textile fibers and yarn. Fabric Construction-weaving, felting, braiding, bonding, knotting. Fabric finishes-objectives, types. Dyeing-classification. Requisites of Printing, preparation of fabrics.
Stiffening agents, Bleaching agents. Dry Cleaning-absorbents and Solvents.
- Unit-II : Elements of arts and principles of design and their application in Clothing. Psychological and sociological influence of clothes. Selection, Care and purchase of fabrics and readymade garments for apparel, household use.
- Unit-III : Clothing budget and consumer problem. Labeling and standardization.
- Unit-IV : Principles of drafting and common fitting problems.

**HOME SCIENCE
PAPER - II**

**SECTION – A
FOODS AND NUTRITION**

- Unit-I : Functions, requirements sources and effects of deficiency and excess of Protein, Carbohydrates, lipids, vitamins and minerals.
- Unit-II : Balanced diet-definition, factors to be considered while planning balance diet meal, planning for various age groups. Principles and methods of food preservation.
- Unit-III : Normal Nutrition during pregnancy, lactation, infancy childhood, adolescence and elderly. Malnutrition-Protein-Calorie malnutrition, Kwashiorkor, Marasmus, Obesity. National Nutrition Programme.
- Unit-IV : Therapeutic diets – etiology, dietary principles and modification in fevers, constipation, diarrhoea, peptic ulcer, hepatitis, cirrhosis, hypertension, renal disorders, diabetes.

**SECTION – B
HUMAN DEVELOPMENT**

- Unit-I : Meaning and Principles of growth and development.
Developmental aspects-Physical, motor, language, social, personality, emotional and cognitive development from infancy to adolescence.
- Unit-II : Marriage-goals, adjustments, success and conflicts.
Family-Meaning, types, functions, family life cycle, parent-child relationship.
- Unit-III : Pre-School education – Meaning, significance and objectives, Stages of Prenatal growth and development, prenatal and post natal care of mother and child. Breast feeding, Weaning.
- Unit-IV : Problems of Childhood, adolescence, old age and disabled, Guidance and Counselling, Juvenile delinquencies.

PHILOSOPHY

**PAPER – I
SECTION - A**

- Unit I : Plato and Aristotle : Idiqs; Substance; form and Matter; Causation; Actuality and Potentiality
Rationalism (Descartes, Spinoza, Leibniz): Cartesian Method and Certain Knowledge; Substance;
God; Mind-Body Dualism; Determinism and Freedom.
- Unit II : Empiricism (Locke, Berkeley, Hume): Theory of Knowledge; substance and Qualities; Self of
God; Scepticism. Kant: Possibility of Synthetic a priori Judgements; space and Time; Categories;
Ideas of Reason; antinomies; Critique of Proofs for the Existence of God. Moore, Russell and
Early Wittgenstein: Defence of Commonsense;; Refutation of Idealism; Logical Atomism;
Logical Constructions; Incomplete Symbols; Picture Theory of Meaning; Saying and Showing.
- Unit III : Hegel: Dialectical Method; Absolute Idealism. Logical Positivism: Verification Theory of
Meaning; Rejection of Metaphysics; Linguistic Theory of Necessary Propositions. Later
Wittgenstein: Meaning and Use; Language-games; Critique of Private Language.
- Unit IV : Phenomenology (Husserl): Method; Theory of Essences; Avoidance of Psychologism.
Existentialism (Kierkegaard, Sartre, Heidegger): Existence and Essence; Choice, Responsibility
and Authentic Existence; Being-in-the-world and Temporality. Quine and Strawson: Critique
of empiricism; Theory of Basic Particulars and Persons.

SECTION B:

- Unit I : Ca-rva-ka: Theory of Knowledge; Rejection of Transcendent Entities. Jainism: Theory of
Reality; Saptabhan (ginaya; Bondage and Liberation.
- Unit II : Schools of Buddhism: Prati-tyasamutpa-da; Ksanikavada, Naira-tmyava-da. Naya-ya-
Vais'esika: theory of Categories; Theory of Appearance; Theory of Prama-na; Self, Liberation;
god; Proofs for the Existence of God; Theory of Causation; Atomistic Theory of Creation.
- Unit III : Sa-mkhya: Prakrti; Purusa; Causation; Liberation Yaga: Citta; Cittavrtti; Klesas; Samadhi;
Kaivalya. Mima-nsa: theory of Knowledge
- Unit IV : Schools of Veda-nta: Brahman; I-s'vara; A-tman; Jagat; Ma-ya; Avidya; Adhya-sa; Moksa;
Aprthaksiddhi; Pancavidhabheda. Aurobindo: Evolution, Involution; Integral Yoga.

PHILOSOPHY
PAPER – II
SECTION - A
SOCIO-POLITICAL PHILOSOPHY

- Unit I :** Social and Political Ideals: Equality, Justice, Liberty. Sovereignty: Austin, Bodin, Laski, Kautilya. Individual and State: Rights; Duties and Accountability.
- Unit II :** Forms of Government: Monarchy; Theocracy and Democracy. Political Ideologies: Anarchism; Marxism and Socialism
- Unit III :** Humanism; Secularism; Multiculturalism. Crime and Punishment: Corruption, Mass Violence, Genocide, Capital Punishment.
- Unit IV :** Development and Social Progress. Gender Discrimination: Female Foeticide, Land and Property Rights; Empowerment. Caste Discrimination: Gandhi and Ambedkar

SECTION - A
PHILOSOPHY OF RELIGION:

- Unit I :** Notions of God: Attributes; Relation to Man and the World. (Indian and Western). Proofs for the Existence of God and their Critique (Indian and Western). Problem of Evil.
- Unit II :** Soul: Immortality; Rebirth and Liberation. Reason, Revelation and Faith.
- Unit III :** Religious Experience: Nature and Object (Indian and Western). Religion without God. Religion and Morality.
- Unit IV :** Religious Pluralism and the Problem of Absolute Truth. Nature of Religious Language: Analogical and Symbolic; Cognitivist and Non- cognitive.

Physics
PAPER – I
SECTION - A

- Unit I :** **Mechanics of Particles**
Mechanics of Particles: Laws of motion; conservation of energy and momentum, applications to rotating frames, centripetal and Coriolis accelerations; Motion under a central force; Conservation of angular momentum, Kepler's laws; Fields and potentials; Gravitational field and potential due to spherical bodies, Gauss and Poisson equations, gravitational self-energy; Two-body problem; Reduced mass; Rutherford scattering; Centre of mass and laboratory reference frames.
- Unit II :** **Mechanics of Rigid Bodies and of Continuous Media**
Mechanics of Rigid Bodies: System of particles; Centre of mass, angular momentum, equations of motion; Conservation theorems for energy, momentum and angular momentum; Elastic and inelastic collisions; Rigid body; Degrees of freedom, Euler's theorem, angular velocity, angular momentum, moments of inertia, theorems of parallel and perpendicular axes, equation of motion for rotation; Molecular rotations (as rigid bodies); Di and tri-atomic molecules; Precessional motion; top, gyroscope.
Mechanics of Continuous Media: Elasticity, Hooke's law and elastic constants of isotropic solids and their inter-relation; Streamline (Laminar) flow, viscosity, Poiseuille's equation, Bernoulli's equation, Stokes' law and applications.
- Unit III :** **Special Relativity**
Special Relativity: Michelson-Morley experiment and its implications; Lorentz transformations-length contraction, time dilation, addition of relativistic velocities, aberration and Doppler effect, mass-energy relation, simple applications to a decay process; Four dimensional momentum vector; Covariance of equations of physics.

Unit IV : **Thermal and Statistical Physics**

Thermodynamics: Laws of thermodynamics, reversible and irreversible processes, entropy; Isothermal, adiabatic, isobaric, isochoric processes and entropy changes; Otto and Diesel engines, Gibbs' phase rule and chemical potential; van der Waals equation of state of a real gas, critical constants; Maxwell-Boltzmann distribution of molecular velocities, transport phenomena, equipartition and virial theorems; Dulong-Petit, Einstein, and Debye's theories of specific heat of solids; Maxwell relations and applications; Clausius-Clapeyron equation; Adiabatic demagnetisation, Joule-Kelvin effect and liquefaction of gases.

Statistical Physics: Macro and micro states, statistical distributions, Maxwell-Boltzmann, Bose-Einstein and Fermi-Dirac distributions, applications to specific heat of gases and blackbody radiation; Concept of negative temperatures.

SECTION - B

Unit I : **Waves, Geometrical Optics and Interference**

Waves: Simple harmonic motion, damped oscillation, forced oscillation and resonance; Beats; Stationary waves in a string; Pulses and wave packets; Phase and group velocities; Reflection and Refraction from Huygens' principle.

Geometrical Optics: Laws of reflection and refraction from Fermat's principle; Matrix method in paraxial optics-thin lens formula, nodal planes, system of two thin lenses, chromatic and spherical aberrations.

Interference: Interference of light-Young's experiment, Newton's rings, interference by thin films, Michelson interferometer; Multiple beam interference and Fabry-Perot interferometer.

Unit II : **Diffraction, Polarization and Modern Optics**

Diffraction: Fraunhofer diffraction-single slit, double slit, diffraction grating, resolving power; Diffraction by a circular aperture and the Airy pattern; Fresnel diffraction: half-period zones and zone plates, circular aperture.

Polarization and Modern Optics: Production and detection of linearly and circularly polarized light; Double refraction, quarter wave plate; Optical activity; Principles of fibre optics, attenuation; Pulse dispersion in step index and parabolic index fibres; Material dispersion, single mode fibres; Lasers-Einstein A and B coefficients; Ruby and He-Ne lasers; Characteristics of laser light-spatial and temporal coherence; Focusing of laser beams; Three-level scheme for laser operation; Holography and simple applications.

Unit III : **Electrostatics, Magnetostatics and Current Electricity**

Electrostatics and Magnetostatics: Laplace and Poisson equations in electrostatics and their applications; Energy of a system of charges, multipole expansion of scalar potential; Method of images and its applications; Potential and field due to a dipole, force and torque on a dipole in an external field; Dielectrics, polarization; Solutions to boundary-value problems-conducting and dielectric spheres in a uniform electric field; Magnetic shell, uniformly magnetized sphere; Ferromagnetic materials, hysteresis, energy loss.

Current Electricity: Kirchhoff's laws and their applications; Biot-Savart law, Ampere's law, Faraday's law, Lenz' law; Self-and mutual-inductances; Mean and r m s values in AC circuits; DC and AC circuits with R, L and C components; Series and parallel resonances; Quality factor; Principle of transformer.

Unit IV : **Electromagnetic Waves and Blackbody Radiation**

Electromagnetic Waves and Blackbody Radiation: Displacement current and Maxwell's equations; Wave equations in vacuum, Poynting theorem; Vector and scalar potentials; Electromagnetic field tensor, covariance of Maxwell's equations; Wave equations in isotropic dielectrics, reflection and refraction at the boundary of two dielectrics; Fresnel's relations; Total internal reflection; Normal and anomalous dispersion; Rayleigh scattering; Blackbody radiation and Planck's radiation law, Stefan-Boltzmann law, Wien's displacement law and Rayleigh-Jeans' law.

PHYSICS
PAPER - II
SECTION -A

Unit I : Basic Quantum Mechanics:

Wave-particle duality; Schroedinger equation and expectation values; Uncertainty principle; Solutions of the one-dimensional Schroedinger equation for a free particle (Gaussian wave-packet), particle in a box, particle in a finite well.

Unit II : Advance Quantum Mechanics:

Linear harmonic oscillator; Reflection and transmission by a step potential and by a rectangular barrier; Particle in a three dimensional box, density of states, free electron theory of metals; Angular momentum; Hydrogen atom; Spin half particles, properties of Pauli spin matrices.

Unit III : Atomic Physics

Stern-Gerlach experiment, electron spin, fine structure of hydrogen atom; L-S coupling, J-J coupling; Spectroscopic notation of atomic states; Zeeman effect; Frank-Condon principle and applications;

Unit IV : Molecular Physics

Elementary theory of rotational, vibrational and electronic spectra of diatomic molecules; Raman effect and molecular structure; Laser Raman spectroscopy; Importance of neutral hydrogen atom, molecular hydrogen and molecular hydrogen ion in astronomy; Fluorescence and Phosphorescence; Elementary theory and applications of NMR and EPR; Elementary ideas about Lamb shift and its significance.

SECTION - B

Unit I : Nuclear Physics:

Basic nuclear properties-size, binding energy, angular momentum, parity, magnetic moment; Semi-empirical mass formula and applications, mass parabolas; Ground state of deuteron, magnetic moment and non-central forces; Meson theory of nuclear forces; Salient features of nuclear forces; Shell model of the nucleus - successes and limitations; Violation of parity in beta decay; Gamma decay and internal conversion; Elementary ideas about Mossbauer spectroscopy; Q-value of nuclear reactions; Nuclear fission and fusion, energy production in stars; Nuclear reactors.

Unit II : Particle Physics:

Classification of elementary particles and their interactions; Conservation laws; Quark structure of hadrons; Field quanta of electroweak and strong interactions; Elementary ideas about unification of forces; Physics of neutrinos.

Unit III : Solid State Physics:

Crystalline and amorphous structure of matter; Different crystal systems, space groups; Methods of determination of crystal structure; X-ray diffraction, scanning and transmission electron microscopies; Band theory of solids - conductors, insulators and semiconductors; Thermal properties of solids, specific heat, Debye theory; Magnetism: dia, para and ferromagnetism; Elements of superconductivity, Meissner effect, Josephson junctions and applications; Elementary ideas about high temperature superconductivity.

Unit IV : Electronics:

Intrinsic and extrinsic semiconductors; p-n-p and n-p-n transistors; Amplifiers and oscillators; Op-amps; FET, JFET and MOSFET; Digital electronics-Boolean identities, De Morgan's laws, logic gates and truth tables; Simple logic circuits; Thermistors, solar cells; Fundamentals of microprocessors and digital computers.

PUBLIC ADMINISTRATION
PAPER – I
(Administrative Theory)
SECTION - A

- Unit I : **Introduction:**
 Meaning, scope and significance of Public Administration; Wilson's vision of Public Administration; Evolution of the discipline and its present status; New Public Administration; Public Choice approach; Challenges of liberalization, Privatisation, Globalisation; Good Governance: concept and application; New Public Management.
- Unit II : **Administrative Thought:**
 Scientific Management and Scientific Management movement; Classical Theory; Weber's bureaucratic model – its critique and post-Weberian Developments; Dynamic Administration (Mary Parker Follett); Human Relations School (Elton Mayo and others); Functions of the Executive (C.I. Barnard); Simon's decision-making theory; Participative Management (R. Likert, C.Argyris, D.McGregor).
- Unit III : **Administrative Behaviour and Organisational patterns ::**
 Process and techniques of decision-making; Communication; Morale; Motivation Theories – content, process and contemporary; Theories of Leadership, Ministries and Departments, Corporations, Companies, Boards and Commissions; Ad hoc and advisory bodies; Headquarters and Field relationships; Regulatory Authorities; Public - Private Partnerships. .
- Unit IV : **Accountability - control and Administrative Law:**
 Concepts of accountability and control; Legislative, Executive and Judicial control over administration; Citizen and Administration; Role of media, interest groups, voluntary organizations; Civil society; Citizen's Charters; Right to Information; Social audit. Administrative Law - Meaning, scope and significance; Delegated legislation; Administrative Tribunals.

SECTION - B

- Unit I : **Comparative Public Administration and Development Dynamics:**
 Historical and sociological factors affecting administrative systems; Administration and politics in different countries; Current status of Comparative Public Administration; Ecology and administration; Riggsian models and their critique. Concept of development; Changing profile of development administration; 'Anti-development thesis'; Bureaucracy and development; Strong state versus the market debate; Impact of liberalisation on administration in developing countries; Women and development - their participation in political leadership.
- Unit II : **Personnel Administration:**
 Importance of human resource development; Recruitment, training, career advancement, position classification, discipline, performance appraisal, promotion, pay and service conditions; employer-employee relations, grievance redressal mechanism; Code of conduct; Administrative ethics.
- Unit III : **Public Policy and Techniques of Administrative Improvement:**
 Models of policy-making and their critique; Processes of conceptualisation, planning, implementation, monitoring, evaluation and review and their limitations; State theories and public policy formulation. Organisation and methods, Work study and work management; e-governance and information technology; Management aid tools like network analysis, MIS, PERT, CPM.
- Unit IV : **Financial Administration:**
 Monetary and fiscal policies; Public borrowings and public debt Budgets - types and forms; Budgetary process; Financial accountability; Accounts and audit.

PUBLIC ADMINISTRATION
PAPER – II
(Indian Administration)
SECTION - A

- Unit I :** **Evolution of Indian Administration:**
Kautilya's Arthashastra; Mughal administration; Legacy of British rule in politics and administration - Indianization of public services, revenue administration, district administration, local self-government; Philosophical and Constitutional Framework of government - Salient features and value premises; Constitutionalism; Political culture; Bureaucracy and democracy.
- Unit II :** **Union Government and Administration:**
Executive, Parliament, Judiciary - structure, functions, work processes; Recent trends; Intragovernmental relations; Cabinet Secretariat; Prime Minister's Office; Central Secretariat; Ministries and Departments; Boards and Commissions; Attached offices; Field organizations; Forms of Public Sector Undertakings
- Unit III :** **State Government and Administration:**
Union-State administrative, legislative and financial relations; Role of the Finance Commission; Governor; Chief Minister; Council of Ministers; Chief Secretary; State Secretariat; Directorates. District Administration since Independence - Changing role of the Collector; Union-state-local relations; Imperatives of development management and law and order administration; District administration and democratic decentralization.
- Unit IV :** **Civil Services:**
Constitutional position; Structure, recruitment, training and capacity-building; Good governance initiatives; Code of conduct and discipline; Staff associations; Political rights; Grievance redressal mechanism; Civil service neutrality; Civil service activism. Administrative Reforms since Independence: Major concerns; Important Committees and Commissions; Reforms in financial management and human resource development and Problems of implementation.

SECTION - B

- Unit I :** **Planning and financial Management:**
Budget as a political instrument; Parliamentary control of public expenditure; Role of finance Ministry; Accounting techniques; Audit; Role of Controller General of Accounts and Comptroller and Auditor General of India. Machinery of planning; Role, composition and functions of the Planning Commission and the National Development Council; 'Indicative' planning; Process of plan formulation at Union and State levels; Constitutional Amendments (1992) and decentralized planning for economic development and social justice.
- Unit II :** **Rural and Urban Local Bodies :**
Institutions and agencies since independence; Rural development programmes: foci and strategies; Decentralization and Panchayati Raj; 73rd Constitutional amendment. Municipal governance: main features, structures, finance and problem areas; 74th Constitutional Amendment; District Planning Committee; global-local debate.
- Unit III :** **Law and Order Administration:**
British legacy; National Police Commission; Investigative agencies; Role of central and state agencies including paramilitary forces in maintenance of law and order and countering insurgency and terrorism; Criminalisation of politics and administration; Police-public relations; Reforms in Police.
- Unit IV :** **Significant issues in Indian Administration:**
Values in public service; Regulatory Commissions; National Human Rights Commission; Problems of administration in coalition regimes; Citizen-administration interface; Corruption and administration; Disaster management."

6. Amendment : (1) In the Principal Regulations, the name of the heading B. PHYSICAL STANDARDS of Schedule -II and its entire provision may be substituted, of Schedule -II namely :-

**" B. PHYSICAL TEST
(For candidates opting Mizoram Police Service)**

- (1) The height and chest measurement of candidate for Mizoram Police shall be taken by the Physical Test Board constituted by the Government in consultation with the Commission. The Physical Test Board shall be constituted with 5 (five) members - two members from Mizoram Public Service Commission, Two members from Police Department not below the rank of Senior Grade of MPS and one from Medical Officers and it shall be headed by Controller of Examination, MPSC.
- (2) The minimum standard of height and chest measurement will be as follows -
- | | Height | Chest girth | Chest girth fully expanded |
|-------|---------|-------------|----------------------------|
| Men | 160cms | 79cms | 84 cms |
| Women | 152 cms | - | - |

- NB : 1) The height and chest of the candidates will be measured twice before coming to a final decision.
 2) There will be no need of measuring chest girth for women candidates.
 3) The test shall be conducted by the Physical Test Board at such places, date and time to be determined by the commission.
 4) The result of Physical test i.e. list of qualified and unqualified candidates shall be submitted by the Physical Test Board to the Commission within 3 days from the date of completion of the tests".

By Orders etc

C. Zothankhumi,
 Addl. Secretary to the Government of Mizoram,
 Department of Personnel & Administrative Reforms.