# MIZORAM PUBLIC SERVICE COMMISSION Mizoram New Capital Complex Aizawl

# Advertisement No. 27 of 2025 - 2026

Dated Aizawl, the 26th August, 2025

**No.A.12026/25/2025-MPSC(PRE): Direct Recruitment** Examination for the under mentioned post is to be conducted by the Mizoram Public Service Commission. Application can be submitted through the Mizoram Public Service Commission's online portal <a href="https://mpsconline.mizoram.gov.in">https://mpsconline.mizoram.gov.in</a> till **26.09.2025 upto 5:00 pm** 

Probable applicants who have not registered in the one-time-registration portal must register latest by 5:00 pm on the last date of submission of application

An Applicant must verify that his/her application is actually submitted after payment is made, otherwise the claim of the applicants regarding his/her Candidature will not be entertained.

1. Name of Post : Assistant Controller of Mines

2. Name of Department: Commerce & Industries

3. Classification : Group 'A'

4. No. of Posts : 1 (One)

5. Pay : Level 10 in the Pay Matrix (Rs. 56, 100 – Rs. 1, 24, 500)

6. Conditions of Eligibility:

# I. Educational Qualifications:

B.E/B.Tech./B.Sc. degree in Mining Engineering from recognized University.

# II. Computer Proficiency:

Computer Proficiency as prescribed by the Mizoram Group 'A', 'B' and 'C' posts Service/Recruitment (Amendment) Rules, 2023 notified vide No. A.12018/31/2020- P&AR (GSW) dated 10.03.2023. (Click for details at <a href="https://tinyurl.com/comp-proficiency.">https://tinyurl.com/comp-proficiency.</a>

# III. Age Limit:

A candidate must not be less than 18 years and not more than 35 years of age on the last date of application. Upper age limit is relaxable up to 5 years in case of ST/SC candidates or as may be notified by the Government from time to time. For age proof, HSLC/HSSLC Certificates which clearly shows the candidate's date of birth shall be accepted. In the absence of date of birth in such certificates, the relevant documents issued by the competent authority may be accepted. (Click for details at <a href="https://tinyurl.com/age-relaxa">https://tinyurl.com/age-relaxa</a>)

# IV. Mizo Language Proficiency:

A candidate must achieve a minimum score in the qualifying test of Mizo Language Proficiency as prescribed by the Government from time to time. However, a candidate who studied Mizo subject in Class-X standard(HSLC) or above within Mizoram or who opted for Mizo subject as MIL outside Mizoram is exempted from taking the qualifying test paper(Reference: the Mizoram Gazette Notification vide No. A- 11019/1/2021-P&AR(GSW)

dt.09.04.2024 issue No.247).]].(Details can be seen on <a href="https://tinyurl.com/mizo-language-proficiency">https://tinyurl.com/mizo-language-proficiency</a>.)

Documentary support to prove all eligibility conditions should not be dated later than the last date of application.

# 7. Disqualifications:

- (i) Canvassing by a candidate directly or indirectly will disqualify his/her candidature.
- (ii) Particulars/Details to be mentioned in the application should be completely and correctly stated. Any application not specifying the required information of a concerned candidate shall be liable to be rejected.
- (iii) Any candidate who, on verification at any stage of the recruitment process, does not fulfill any of the eligibility conditions will be disqualified.

# 8. Expulsion of Candidate:

- (i) Where a candidate is found guilty of misconduct or malpractice or any offence in the examination he shall be expelled and shall not be allowed to continue the examination. In such cases, the Centre Superintendent shall submit a report in the prescribed form (Appendix – XII of MPSC (Conduct of Examinations) Guidelines, 2023) to the Controller of Examinations, stating in full the facts and situation accompanied by the evidence against the candidate in a sealed cover.
- (ii) When a candidate is suspected of using unfair means during the Examination by the Centre Superintendent but lacking in proof of the candidate's misdeeds to warrant expulsion, the Centre Superintendent may allow him/her to continue the examination. However, the Centre Superintendent has to make a special report enclosing the answer book and any other incriminating documents, if any, in a sealed cover to the Controller of Examinations, clearly indicating in red ink the portions wherein unfair means is suspected to have been practiced.
- (iii) Any candidate threatening or intimidating any Invigilator will be expelled from the examination hall/room immediately and the matter will be reported to the Controller of Examinations as well as the local police.
- (iv) In the event of any contingencies, which calls for immediate action, appropriate action will be taken on the candidate under The Mizoram Prevention of Malpractices at Examination Act, 1990 and Bharatiya Nagarik Suraksha Sanhita (BNSS), 2023.

#### 9. Debarment:

Candidate(s) charged under Guideline 29 (i) or (ii) or (iii) of Mizoram Public Service Commission (Conduct of Examinations) Guidelines, 2023 and found guilty may be debarred from appearing in any examinations/recruitment conducted by the Mizoram Public Service Commission. The Commission will maintain a record of this and the same shall be sent to Union Public Service Commission as well as other State Public Service Commissions. Candidate(s) debarred by the Union Public Service Commission and other State Public Service Commissions shall also automatically be debarred by the Mizoram Public Service Commission.

**10.** Government servants will have to apply through proper channel.

- 11. <u>Syllabus</u> for the examination is available for download on the Commission's official website <a href="https://tinyurl.com/asstcontofmines">https://tinyurl.com/asstcontofmines</a>
- **12.** Any additional information regarding this advertisement will be published on the Commission's official website.
- 13. If payment is to be done through UPI, it may be done using only the mobile number used for one time registration. Persons with disabilities are exempted from payment of application fees. Fees once paid is non-refundable under any circumstances.

In case of queries/clarification regarding their applications, candidature, etc. candidates may contact MPSC's **Helpline No. 0389-3596493** on working days between **10:00 AM and 4:00 PM**.

**Sd/-K.LALRINKIMA**Additional Secretary

Memo No. A.12026/25/2025-MPSC(PRE)

Dated Aizawl, the 26th August, 2025

# Copy to:-

- 1. Sr.PPS to Chairman, Mizoram Public Service Commission, Aizawl.
- 2. PS to Secretary, Mizoram Public Service Commission, Aizawl.
- 3. Under Secretary to the Govt. of Mizoram, DP&AR(GSW) reference to letter No.A.32013/28/2024-P&Ar(GSW) dt.20.06.2025
- 4. All Administrative Departments, Govt. of Mizoram.
- 5. All Heads of Departments, Govt. of Mizoram.
- 6. Deputy Commissioners, Aizawl / Lunglei / Siaha / Champhai / Kolasib / Serchhip / Lawngtlai / Mamit / Saitual / Khawzawl / Hnahthial for displayed in the Notice Board.
- 7. Resident Commissioner / Additional / Joint / Deputy / Asst. Resident Commissioners, Mizoram Houses New Delhi / Kolkata / Mumbai / Guwahati / Shillong / Silchar / Bengaluru for display in the Notice Board of Mizoram Houses.
- 8. District Employment Officer, Aizawl, Lunglei, Siaha and Champhai for display in the Notice Board.
- 9. Notice Board.
- 10. Guard File.

(LALSAWMZUALA) Deputy Secretary

# GOVERNMENT OF MIZORAM COMMERCE & INDUSTRIES DEPARTMENT

# NOTIFICATION

Mizoram Secretariat, MINECO Aizawl, the 19th August, 2025.

**No.A.12018/5/2015-IND(GM)**: In the interest of public service, the Governor of Mizoram hereby notifies approved Syllabus as shown below for direct recruitment to the post of Assistant Controller of Mines at Level -10 in the Pay Matrix under Directorate of Geology & Mining, Commerce & Industries Department.

This is issued with the approval of DP&AR (GSW) vide I.D. No.GSW 17/2025/852 dt. 06.08.2025.

# APPROVED SYLLABUS FOR ASSISTANT CONTROLLER OF MINES

Sl.No.	Subject	Marks Allotted	Duration
(1)	General English (Conventional &	100	3 hrs with
1	MCQ)		compensatory
	, ,		time of 20
			minutes per
-			hour for persons
1			with
			benchmarked
			disablilities
(2)	General Studies	100	2 hrs with
	+(MCQ)		compensatory
(			time of 20
			minutes per
1			hour for persons
		*	with
	* *		benchmarked
			disablilities
(3)	Technical Paper – 1		2 hrs with
	(50% Conventional & 50% MCQ)	200	compensatory
			time of 20
			minutes per
			hour for persons
1			with
			benchmarked
			disablilities

(4)	Technical Paper – II		
` ,	(50% Conventional & 50% MCQ)	200	2 hrs with
			compensatory
			time of 20
			minutes per
			hour for persons
			with
			benchmarked
			disablilities
(5)	Technical Paper – II		
	(50% Conventional & 50% MCQ)	200	2 hrs with
			compensatory
			time of 20
			minutes per
			hour for persons
			with
	- 1		benchmarked
			disablilities
	TOTAL	800	
(6)	Personal Interview	100	
	1		

# **DETAILS OF SYLLABUS:**

1.	General English	:	100 Marks
	(a) Précis Writing	:	14 Marks
	(b) Letter Writing		10 Marks
	(c) Comprehension of given passages	:	10 Marks
	(d) Grammar: Parts of Speech(MCQ)	:	30 Marks
	(e) Correct usage and Vocabularies (MCQ)	:	16 Marks

(f) Formation of Sentence (MCQ)

20 Marks

(i) Verbs

*Tenses*: Present/past forms, Simple/continuous forms, Perfect forms, Future time reference

(ii) Sentence Structure

**Connectors** 

Types of sentences: Affirmative/interrogative sentences, Negation, Exclamations

Types of Phrases and Clauses: finite and non-finite subordinate clauses, noun clauses and phrases, adjective clauses and phrases, adverb clauses and phrases

Narration (Direct and Indirect speech)

16 marks

#### 100 General Studies (MCQ) Marks Current events of state, national and international 12 marks importance (b) History of India and Indian National Movement 12 marks (c) Indian and World Geography -Physical, Social, Economic Geography of India and the World 12 marks (d) Indian Polity and Governance - Constitution, Political System, Public Policy, Duties & Rights Issues 12 marks Economic and Social Development, Sustainable Development, Poverty, Inclusion, Demographics, Social Sector initiatives, and other related issues 12 marks General issues on Environmental Ecology, Bio-diversity and Climate 12 marks 12 marks (g) General Science The topics listed above shall also cover the State of Mizoram

#### 3. Technical Paper -I

wherever applicable.

its heritage and society

(Mining Methods; Rock Mechanics & Ground Control; Mine Ventilation; Mining Geology)

#### Section - A : Mining Methods (70 Marks)

General awareness on Mizo culture,

Underground Coal Mining: Rank of Coal, Banded constituent of Coal, Size gradation of Coal, Analysis of Coal (Ultimate Analysis & Proximate Analysis), Types of Coal (Non-Coking Coal & Coking Coal), Caking or Agglutinating Index, Protodyaknov Index, Composition of Different Coal Burning Gases, Incubation period of Coal. Coal Mining Methods: Board & Pillar Mining (Dimension of Pillar and Galleries at different depths, Percentage of Extraction, Tributary Area, Load acting on pillar, Strength of pillar, Factor of safety of pillar, Line of extraction), Hydraulic Mining, Auger Mining, Contour Mining, Strip Mining; Underground Metalliferous Mining: Gestation Period, Cut-off Grade, Break-Even Cut-off Grade, Raise or Winze, Raising Methods (Open Raising by drilling, blasting, mucking, Two or Three Compartmental raising, Raising by long hole drilling, Raising with Alimak Raise Climber, Raise borers, Drop Raising Method), Sampling, Average grade of an ore block, Metal Mining Methods (Overhand Stoping, Underhand Stoping, Breast Stoping, Sub-Level Stoping, Long Hole Stoping or Blast Hole Stoping, Room and Pillar Mining, Shrinkage Stoping, Cut and fill Stoping, Square Set Stoping, Block Caving, Sub Level Caving); Opencast Mining Methods: Stripping Ratio, BreakEven Stripping Ratio, Parameters of the working Bench, DGMS norms in Opencast Mining, Types of Ramps, Determination of Powder factor, Types of Slope Failure,

Determination of Factor of Safety of Slope, Pit Limit Optimization; Subsidence in Mines: Angle of Draw, Caving height or Thickness of the immediate roof.

### Section - B : Rock Mechanics & Ground Control (50 Marks)

Methods of Rock Exploration: By direct penetration, Geophysical Prospecting (Seismic Method, Electrical Method, Gravity Method, Magnetic Method); Rock Quality Designation (RQD); Physical and Mechanical Properties of Rocks: Unit Weight, Specific Gravity of Solids, Determination of Specific Gravity of a Soil Sample, Void Ratio, Porosity, Density, Dry Density, Bulk Density, Saturated Density; Moisture Content; Degree of Saturation; Permeability; Anisotropy and Isotropy; Stress; Strain; Strain Energy; Modulus of Elasticity of Rock; Poisson Ratio; Unit Volume Change Relationship between Elastic Constants; Deformability: Hardness; Classification of Rock Strength: Compressive Strength, Tensile Strength & Shear Strength); Seismic Velocities related to material properties; Rock Mass Strength Indices: Point Load Strength Index & Slake Durability Index; Testing of Rock Samples: Uni-axial Compressive Strength Test, Brazilian Test, Bending Test, Punch Shear Test; Types of classification of Rock Masses; Determination of Shear Strength; Principle Stress; Mohr's Circle Analyses; Shearing on an inclined plane; Generalized Hoek-Brown Strength Criterion; Determination of Factor of Safety of Slope: Plane Failure & Circular Failure; Stress and Displacement Distribution in Circular Excavation; Determination of Length of Roof Bolt; Determination of mean Shear Strength using short anchor tests.

#### Section - C : Mine Ventilation (40 Marks)

Composition of Mine Air; Layer of Gasses in Mine Atmosphere; Damps in Underground Mine Atmosphere; Permissible Concentrations of different Gasses in Indian Underground Mines; Degree of Gassiness of Coal Mines; Gas Monitoring Instruments; Coward Diagram; Dealing with firedamp in Mines; Methane Layering Number; Graham's Ratio and its Importance; Rescue/Escape/Reviving apparatus; Air Flow through Mine Openings: Nature of Flow, Pressure drop in Mine Airway, Shock Loss at Area Changes and Bends, Co-efficient of Contraction; Equivalent Resistance; Air Power; Equivalent Orifice; Methods of Velocity Measurement; Natural and Mechanical Ventilation: NVP (Natural Ventilation Pressure), Motive Column, Head (H,) Generation by Mine Fan, Fan Laws, Ventilation Survey, Measurement of Velocity of Airflow, Measurement of Quantity of Airflow, Measurement of Relative Humidity.

#### Section - D : Mining Geology (40 Marks)

Mineralogy: Origin of Minerals, Physical and Chemical properties of Minerals; Petrology: Igneous Rocks, Sedimentary Rocks, Metamorphic Rocks; Structural Geology: Dip and Strike, Joints, Faults, Folds, Structural Discontinuities - Impact on Workability, Mining/Quarrying of Rock Deposits; Paleontology: Mode of preservation of fossils, Uses of fossils, Standard Geological Time Scale; Economic Geology: Process of formation of Mineral Deposits, Classification of Mineral deposits, Important economic minerals of India.

# Technical Paper - II (Mine Environment; Mine Surveying; Mining Machinery; Explosives, Drilling and Blasting Techniques in Mines)

#### Section - A : Mine Environment (50 Marks)

Air Pollution: Air Pollutants: Standards, Sources of Air Pollution in Mining Industries, Air Pollution Control Devices, Miner's Disease and Dust Hazards, Dust Sampling Methods; Noise Pollution: Measurement of Noise, Equivalent Noise level, Frequency Spectrum, Frequency Weighing, Sound Wave propagation (Point Source & Line Source), Noise Pollution Standards (Worksite Standards & Ambient Standards); Water Pollution: Water Pollution Parameters — pH, Total: Suspended Solids, Bio-chemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Standards of Effluents Discharge from Coal Mining; Illumination: Definitions of Important terms of Photometry. — Intensity, Horizontal Illuminance, Vertical illuminance, Mean Spherical Candle Power (m.s.c.p),: illumination, Lumen (lm), Lux, Footcandle (fc); Illumination Standards in Mines (Opencast Mining Areas & Underground Working Areas).

# Section - B: Mine Surveying (40 Marks)

Representative Factor; Distance Measuring Instruments; Correction Factors in Line Measurement: Correction Factor due.to Incorrect Chain, Slope Correction Factor, Correction " for Absolute Length, Correction for Temperature, Correction for Pull, Correction for Sag; Traversing: Bearing of Lines, True meridians or Geographical Meridians, Magnetic Meridian, Arbitrary meridian, Magnetic Declination, Designation of Bearing (Whole Circle Bearing, Quadrantal or Reduced Bearing & Fore or Back Bearing; Theodolite: Magnification or Magnifying Power, Error in Theodolite Traverse (Permissible Linear Error & Permissible Angular Error), Relation between Angular And Linear Measurement, Latitude and Longitude of a Line, Close Traverse Survey, Computation of Areas of Irregular Boundaries (Mid Ordinate Rule, Average Ordinate Rule, Trapezoidal Rule & Simpson's Rule); Levelling: Classification of Levelling (Differential Levelling, Check Levelling, Profile Levelling, Cross Sectioning, Reciprocal Levelling, Barometric Levelling, Hypsometry, Trigonometric Levelling), Determination of Reduced Level (RL), Correction Factor in Levelling (Correction for Curvature & Correction for Refraction); Tacheometric Survey: Method of Tacheometry, Determination of Horizontal and Vertical Distance in Different Conditions; Triangulation Adjustments: Definition of Various Observation and Error Parameters, The Most Probable Values of Quantities (Direct Observation of Equal Weight, Direct Observation of Unequal Weight, Indirect Observation on independent quantities of Equal Weight, Indirect Observation on independent quantities of Unequal Weight, Indirect Observation on conditioned quantities), The Probable Error (Direct Observation of Equal Weight, Direct Observation of Unequal Weight, Laws of Weight, Computed Quantities), Correlation (Weisbach Triangle Method), Global Positioning System(GPS) - How it Works & Its Application in Mining Industry, Photogrammetry - Aerial Photogrammetry (Distortion due to Height or Relief, Flight Planning, Determination of number of Photographs for a Particular Area, Intervals Between Exposures).

# Section - C : Mining Machinery (50 Marks)

Types of Clutches; Types of Gears - Gear Calculations; Wire Ropes: Classification of Wire Ropes (On the Basis of Operation & On the basis of Construction), Application of Wire Ropes in Mines, Space Factor, Mass of Rope, Strength of Rope, Rope Splicing, Capping of Rope; Winding System: Types of Winding System in Underground Mines (Drum Winding & Friction Winding or Koepe Winding), Pit Top/Bottom Track Arrangement in Winding System; Underground Haulage System: Types of Haulage System - Direct Rope Haulage, Endless Haulage, Main and Tail Rope Haulage, Tail Rope Haulage, Gravity Haulage; Super Elevation; Safety devices used in Haulage Arrangement; Power Requirement of the Motor to Run Haulage; Direct Rope Haulage & Endless Rope Haulage; Locomotive Transport; Conveyor Transport: Belt Conveyor, Cable Belt Conveyor, Disc Conveyors, High Angle Conveyor; Mine Pump: Pressure to Head conversion formula, Types of Head, Power and Efficiency, Specific Speed, The Affinity Laws.

Section – D: Explosives, Drilling and Blasting Techniques in Mines (60 Marks) Definition of Explosives; Classification of Explosives; Types of explosives; Permitted Explosives; Theory of Rock Fragmentation by Blasting; Blast Design Parameters; Characteristics of Explosives; Powder Factor; Maximum permissible charge in a shot hole; Detonator; Velocity of Detonation (VOD); Detonating Pressure; Types of Detonators and their Characteristics; DGMS Stipulation on ground vibration; DGMS Stipulation on Delay Intervals; Drilling pattern; Warning system; Misfires; Drilling methods and their Rock Cut Principles; Standards for Drill Hole Diameters and core sizes; General Safety measures to control blast induced vibration; Threshold value of Ground Vibration; Transportation of Explosives and Magazines.

#### 5. Technical Paper - III

(Mine Economics & Geo-statistics; Mineral Dressing; Mine Legislation & General Safety; Aptitude Test)

#### Section - A : Mine Economics & Geo-statistics (40 Marks)

Appraisal Techniques (Non-Discounting Techniques & Discounting Techniques); Determination of Future Worth; Depreciation; Redemption; Depletion; Arithmetic Mean; Median; Mode; Standard Deviation; Mean Deviation or the Average Deviation; Coefficient of Variation; Probability Distribution Function; Normal Distribution; Poisson Distribution; Exponential Distribution; Expectation of Variate; Skewness; Probability.

#### Section - B : Mineral Dressing (30 Marks)

Classification; Crushers: Types — Primary Crushers, Secondary Crushers & Tertiary Crushers or Impact Crushers; Grinding Mills; Tumbling Mills (Rod Mill and Baill Mill, Autogenous Mills), Stirred Mills; Principles of Classification in Liquid Medium: Free Settling, Hindered Setting, Jigging, Dense Media Separation / Heavy Media Separation, Froth Floatation, Washing.

# Section - C : Mine Legislation & General Safety (80 Marks)

The Mines & Minerals (Development and Regulation Act, 1957; The Minerals Conservation and Development Rules, 2017; The Mineral Concession Rules, 1960; The Mines Act, 1952; The Mines Rules, 1955; The Oil Mines Regulations, 2017; The Coal Mines Regulations 2017; The Metalliferous Mines Regulations 1961; The Mizoram Minor Minerals Concession Rules, 2000; The Oilfields (Regulation & Development) Act, 1948; The Petroleum and Natural Gas Rules, 1959; The Explosives Act, 1884; The Explosives Substance Act, 1908; The Explosives Rules, 2008; DGMS Circulars; National Mineral Policy, 2019.

# Section - D : Aptitude Test (50 Marks)

- Numerical and Figure work Tests: (16 Marks)
  - These tests are reflections of fluency with numbers and calculations. It shows how easily a person can think with numbers. The subject will be given a series of numbers.
  - His/ Her task is to see how the numbers go together to form a relationship with each other. He/ She have to choose a number which would go next in the series.
- Verbal Analysis and Vocabulary Tests: (14 Marks)

  These tests measure the degree of comfort and fluency with the English language. These tests will measure how a person will reason with words. The subject will be given questions with alternative answers that will reflect his/her command of the rule and use of English language.
- Visual And Spatial/3-D Ability Tests: (10 Marks)
   These tests are used to measure perceptual speed and acuity. The subject will be shown pictures where he/she is asked to identify the odd one out; or which comes next in the sequence or explores how easily he/she can see and turn around objects in space.
- Abstract Reasoning Tests: (10 Marks)

  This test measures the ability to analyse information and solve problems on a complex, thought based level. It measures a person's ability to quickly identify patterns, logical rules and trends in new data, integrate this information, and apply it to solve problems.

#### Sd/- Dr. LALZIRMAWIA CHHANGTE

Commissioner & Secretary to the Govt. of Mizoram Commerce & Industries Department.