

No.A.12024/19/2024-MPSC(DR-II)
MIZORAM PUBLIC SERVICE COMMISSION
Mizoram New Capital Complex, Aizawl

Dated Aizawl, the 19th February, 2025

Advertisement (Non-Gazetted Post) No. 11 of 2024 – 2025

The under mentioned vacant posts can be applied online on the Mizoram Public Service Commission's online portal <https://mpsconline.mizoram.gov.in> till **20/03/2025**.

1. Name of Examination : Combined JE (Civil) Examination, 2025

Sl. No.	Name of Post	No. of Posts	Name of Department	Pay Level in the Pay Matrix	Educational and other qualifications required	Reservation
1	JE (Contract Basis)	2 (Two)	Local Administration Department	Level 7	Diploma in Civil Engineering from recognised institution.	Nil
2	JE (Contract Basis) (Civil)	8+2=10 {(2 (two) Posts reserved for PwBD)}	Public Works Department	Level 7	High School Leaving Certificate (HSLC) with 3 Years Diploma in Civil Engineering from Govt. recognised Institute.	2 (two) Posts reserved for Persons with Benchmark Disabilities with one post each for a category of autism, intellectual disability, specific learning disability and mental illness and a category of multiple disabilities including deaf-blindness.
	Total	12				

2. Common eligibility criteria:

i) 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. Further relaxation to the upper age limit will be as per Notification No.A-12011/1/2019-P&AR (GSW) dt.3.6.2019 (published in the Mizoram Gazette Extraordinary, Issue No. 375 dt.10.6.2019) as amended from time to time. For age proof documents, 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.

ii) 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).

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

3. Disqualification :

- (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 fulfil any of the eligibility conditions will be disqualified.

4. Expulsion of Candidate:

- (i) Where a candidate is found guilty of misconduct or malpractice or any offence 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 to the Controller, 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, clearly indicating in red ink the portions wherein unfair means is suspected to have been practised.
- (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 as well as the local police.
- (iv) In the event of any contingencies arising which may call for immediate action, action will be taken on the candidate under The Mizoram Prevention of Malpractices at Examination Act, 1990 and further action will also be taken under BNSS, 2023.

5. Debarment:

Candidate(s) charged under Mizoram Public Service Commission (Conduct of Examination) Guidelines 2023 Para 29 (i) or (ii) or (iii) 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 automatically be debarred by the Mizoram Public Service Commission.

- 6. Government servants will have to apply through proper channel.
- 7. **Syllabus:** Syllabus for the examination is available for download on the Commission's official website <https://tinyurl.com/JE-Civil-Combined-Syllabus> and also placed alongside this Advertisement.
- 8. Any other information pertinent to this advertisement will be published on the Commission's official website.

*In case of queries/clarification regarding their applications, candidature, etc. candidates may contact MPSC's **Helpline No. 0389-3596493** on working days between **10:00am and 3:30pm***

Sd/-Dr. H.LIANZELA
Secretary

Memo No. No.A.12024/19/2024-MPSC(DR-II) : Dated Aizawl, the 19th February, 2025
Copy to:-

1. Sr.PPS to Chairman, Mizoram Public Service Commission, Aizawl.
2. PPS/PS to Members, Mizoram Public Service Commission, Aizawl.
3. PS to Secretary, Mizoram Public Service Commission, Aizawl.
4. The Secretaries to the Govt. of Mizoram, LAD & PWD with reference to the letters No. A12031/9/2023-LAD dt.31.07.2024 and No.A12025(iii)/1/2023-PWD(E) dt. 17.10.2024 respectively.
5. All Administrative Departments, Govt. of Mizoram.
6. All Heads of Departments, Govt. of Mizoram.
7. Deputy Commissioners, Aizawl / Lunglei / Siaha / Champhai / Kolasib / Serchhip / Lawngtlai / Mamit / Saitual / Khawzawl / Hnahthial with two spare copies each. One copy should be displayed in the Notice Board.
8. Resident Commissioner / Additional / Joint / Deputy / Asst. Resident Commissioners, Mizoram Houses – New Delhi / Kolkata / Mumbai / Guwahati / Shillong / Silchar / Bengaluru with two spare copies each for display in the Notice Board of Mizoram Houses.
9. District Employment Officer, Aizawl, Lunglei, Siaha, Champhai, Kolasib, Serchhip, Lawngtlai and Mamit with two spare copies each for display in the Notice Board.
10. All Officers, Mizoram Public Service Commission.
11. All Sections, Mizoram Public Service Commission.
12. Confidential Cell, Mizoram Public Service Commission, with 2 spare copies.
13. I.T. Cell, Mizoram Public Service Commission for uploading on the website.
14. Notice Board.
15. Guard File.


(VANLALTANPUIA)
Joint Controller of Examinations

COMMON SYLLABUS FOR RECRUITMENT TO THE POSTS OF JUNIOR ENGINEERING UNDER PWD & LAD, GOVT OF MIZORAM

The examination shall comprise of the following papers:

1) Paper – I : General English	:	100 Marks (3 hours)
2) Paper – II : General Knowledge (MCQ)	:	100 Marks (2 hours)
3) Paper – III : Technical Subject (MCQ)	:	200 Marks (2 hours)
4) Paper – IV : Technical Subject (MCQ)	:	200 Marks (2 hours)
Total of Written Examination :		600 Marks
5) Personal Interview	:	80 Marks
Total	:	680 Marks

DETAILED SYLLABUS:

1) PAPER – I : General English: 100 Marks (3 hours)

a) Précis Writing	:	10 marks
b) Letter Writing	:	15 marks
c) Comprehension of given passages	:	15 marks
d) Grammar: Parts of Speech	:	20 marks
e) Correct Usage and Vocabularies	:	20 marks
f) Formation of Sentence	:	20 marks

2) PAPER – II : General Knowledge (MCQ): 100 Marks (2 hours)

(a) Current events of state, national and international importance	:	12 marks
(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
(e) Economic and Social Development Sustainable Development, Poverty, Inclusion, Demographics, Social Sector initiatives, and other related issues	:	12 marks
(f) General issues on Environmental Ecology, Bio-diversity and Climate	:	12 marks
(g) General Science	:	12 marks

The topics listed above shall cover the State of Mizoram wherever applicable.

(h) General awareness on Mizo culture, its heritage and society	:	16 marks
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Paper – III (Technical Subject) (MCQ) (2 Hours)

1. Building Materials (50 Marks)

Physical and Chemical properties, Classification, Standard Test, Uses and Types of Materials:- Building stones, Bricks, Silicate based materials, Cement and Mortars, Sand, Aggregates, Asbestos products, Timber and Wood based Products, Paints, Varnishes, Ferrous metals, Lubricants, Sealants for joints, Polymers and Plastics, Protective and decorative coatings.

2. Soil Mechanics and Foundation Engineering (50 Marks)

Origin of soil, phase diagram, Definitions Void ratio, porosity, degree of saturation, water content, specific gravity of soil grains, unit weights, density index and interrelationship of different parameters, Grain size distribution curves and their uses. Index properties of soils Atterberg's limits, ISI soil classification and plasticity chart. Permeability of soil, coefficient of permeability, determination of coefficient of permeability, Shear strength of soils, direct shear test, Vane shear test, Triaxial test. Soil compaction, Laboratory compaction test, Maximum dry density and optimum moisture content, earth pressure theories, active and passive earth pressures, Bearing capacity of soils, plate load test, standard penetration test. Foundation engineering:- Foundation classification, Different type and selection criteria of foundation type, Requirements for a stable foundation, Minimum depth for shallow foundation, Definitions of bearing capacity of soil, Type of failure of soil below foundation footing, Determination of size of foundation footings.

3. Hydrology and Rainwater harvesting-(30 Marks)

Hydrological cycle, Water budget equation, Precipitation :- forms, characteristics of precipitation on india, measurement, losses from precipitation. Run-off :- hydrograph, characteristics of streams, yield, droughts, surface water resources of india. Ground water :- forms, aquifer properties, geological formations as aquifers. Wells, Well losses, Specific capacity, Ground water capacity. Rainwater harvesting:- Definition of terms :- aquifer, artificial recharge, bore well, dry well, open wells, water table. Components of roof top rainwater harvesting and conservation system. Calculation of amount of rainwater that can be harvested from roof top. Design tanks. General recommendations for rainwater parameters for settlement harvesting. Quality of rainwater and method of treatment.

4. Design of RCC Building members and RCC water tanks (20 Marks) Principles of Limit state method (LSM) and Working stress method of design, Provisions of IS:456 and IS:13920 (Latest version) -Materials, workmanship, inspection, testing, placing and requirement of reinforcement, requirement of cement, aggregates and water. Water/Cement ration. Characteristic load & Strength, Partial factor of safety, Stress-strain characteristic of concrete and steel, Limit state of Durability, limit state of collapse in flexure and shear, limit state of serviceability. Theory and design of singly reinforced members. Bond, anchorage, development length and splicing. Design and IS code provisions for short columns, one way and two way slabs, isolated footing.

RCC water tanks: Indian standard codes and provisions prescribed for designing water retaining structures, causes and control of cracking, joints in water retaining structures. Removal of formworks/shutters. Lining, lighting protection and ventilation of water tanks. Regular capacity and design capacity of water tanks. Classification and layout of elevated tanks. Nomenclature and functions of ancillary items of water retaining structures. Components of water retaining structures.

5. **Protective works, Slope stability and Landslide correction (50 Marks)**

Design, construction, specifications and uses of Retaining walls, Breast walls, Toe walls, Crib walls and Revetment walls. Classification of slope movement. Causes of slope movement. Landslide investigations. Stability analysis, corrective measures and design considerations

PAPER –IV (Technical Subject) (MCQ - 2 Hours)

1. **Estimating, Costing and Valuation (50 Marks)**

Estimate, Glossary of technical terms, Analysis of rates, Methods and unit of measurement, Items of work - Earthwork, Brick work (Modular & Traditional bricks), RCC work, Shuttering, Timber work, Painting, Flooring, Plastering. Boundary wall, Brick building, Water Tank, Septic tank, Bar bending schedule. Centre line method, Mid-section formula, Trapezoidal formula, Simpson's rule. Cost estimate of Septic tank, flexible pavements, Tube well, isolated and combined footings, Steel Truss, Piles and pile-caps. Valuation - Value and cost, scrap value, salvage value, assessed value, sinking fund, depreciation and obsolescence, methods of valuation.

2. **Transportation Engineering and Surveying (50 Marks)**

Highway Engineering cross sectional elements, geometric design, types of pavements, pavement materials aggregates and bitumen, different tests, Construction and specifications of Granular Sub-Base (GSB), Water Bound Macadam (WBM) and Wet Mix Macadam (WMM), Gravel Road, Bituminous distresses and construction. Rigid pavement joint, Type of pavement maintenance. Highway drainage. Traffic Engineering Traffic signals, traffic operation, traffic signs and markings, road safety. Surveying: Principles of surveying, measurement of distance, chain surveying, working of prismatic compass, compass traversing, bearings, local attraction, plane table surveying, theodolite traversing, adjustment of theodolite, Levelling, Definition of terms used in leveling, contouring, curvature and refraction corrections, temporary and permanent adjustments of dumpy level, methods of contouring, uses of contour map, tachometric survey, curve setting, earth work calculation, advanced surveying equipment.

3. **Environmental Engineering (20 Marks)**

Quality of water, source of water supply, purification of water, distribution of water, need of sanitation, sewerage systems, circular sewer, oval sewer, appurtenances, sewage treatments. Surface water drainage. Solid waste management - types, effects, engineered management system. Air pollution - pollutants, causes, effects, control. Noise pollution - causes, health effects, control.

4. **Design of Steel structures and Steel water tanks (20 Marks)**

Riveted and Bolted joints:- types and definitions. Riveted joints: assumptions in the theory. Failures, strength and efficiency. Design of riveted joints for axially loaded members. Welded joints: processes, types and symbols, advantages and disadvantages. Terms used in the design of fillet welds and butt welds. Compression members - effective length, maximum slenderness ratio, typical cross-section, design of compression members. Steel tanks :- Types of steel tanks commonly used, accessories commonly required, pressed steel tanks.

5. **Professional practices (30 Marks)**

Schedule of works, Schedule of rates (SOR), Analysis of rates, Technical specifications, Cost indices. Stages for execution of works:- administrative approval, expenditure sanction, technical sanction, deviations, extra and substituted items, contingencies, work charged establishment, Types of estimate. Tendering and Agreement sale, opening and acceptance of tenders, earnest money, performance guarantee, security deposit, extension of time, liquidated damage, advance payment to contractors. Measurement book writing, recording, testing of measurement, loss of measurement book. Contract - definition, essential elements of a valid contract, offer and acceptance. Free consent (Definition and consequences) coercion, undue influence, fraud, mis-representation, mistake. Special contracts :- indemnity, guarantee, bailment and pledge, agency.

6. **Aptitude Test (30 Marks)**

(a) Numerical And Figure work Tests: (8 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 has to choose a number which would go next in the series.

(b) Verbal Analysis And Vocabulary Tests: (8 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.

(c) Visual And Spatial/3-D Ability Tests: (6Marks)

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.

(d) Abstract Reasoning Tests: (8 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.
