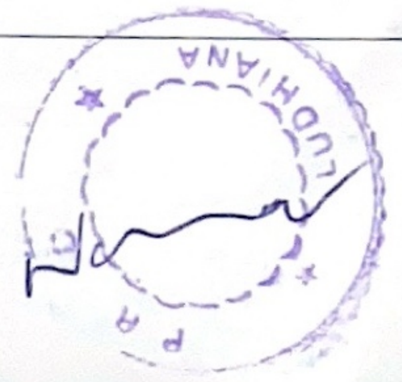
List of Screened In/Eligible Candidates for the Post of Junior Engineer (Utilities Facilities Mgt. and Maintenance)

Sr No.	Name	Father's Name	D.O.B	Screening Status	If Screened Out, Reason of Rejection
1	Ram Singh Aidan	Sh. Davinder Singh	05-08-1996	In	
2	Sahil Chaudhry	Sh.Bal Krishan Chaudhry	16-08-1994	In	
3	Ravneet Singh	Sh. Ranjit Singh	15-09-1988	In	
4	Mohd. Aasif	Sh. Mohd. Sharif	11-09-1989	In	
5	Prince Dhiman	Sh. Sukhdev Dhiman	17-05-1997	In	
6	Mithun Sood	Sh . Chander Mohan Sood	05.02.1996	In	
7	Lovepreet	Sh. Lal Chand	03-09-1992	In	
8	Gagandeep Singh	Sh.Satnam Singh	28-01-1991	In	
9	Jitesh	Sh. Lok Nath	02-07-1990	In	
10	Sehajbeer Singh	Sh.Ranapartap Singh	20-11-1997	In	
11	Randeep Singh	Sh. Ramphal Singh	04-03-1999	In	
12	Anish Kumar Sharma	Sh. Pardeep Kumar Sharma	06-01-1991	In	
13	Sarabjit Singh	Sh. Bahadur Singh	06-10-1995	In	
14	Sahibdeep Singh	Sh. Sohan Singh	02-02-1994	In	
15	Amanjot Singh	Sh. Jaswinder Singh	09-08-1993	Out	No Minimum Experience in the relevant field.
16	Yogesh Verma	Sh. Kewal Kishan	13-09-1994	Out	No Minimum Experience in the relevant field.



Plan of Written Examination

Screened In/Eligible candidates (List Attached) are informed as under with respect to the written test to be conducted for the recruitment of **Junior Engineer (Civil/PHE) (Advt. No.03 of 2023): -**

1. The Exam will be conducted in MCQ (Multiple Choice Questions) format.
2. The Exam would be of 2 hours 30 minutes duration.
3. The Exam will consist of two parts (Part A and Part B) as follows:-

(a) **Part A:- Xth Level** Punjabi as Qualifying Exam as per Notification No. G.S.R.72/Const./ Art.309/Amd.(22)/2022, dated:28.10.2022.

Part	Topic	No. of Questions	Marks (Each Question carries 1 mark)	Type of Questions
A	Punjabi (Qualifying Nature) (Annexure-1)	50	50	MCQs (Multiple Choice Questions)

Note: - (i) There will be no negative marking in Part-A.

(ii) Part 'B' will be evaluated only if a candidate scores minimum 50% marks (i.e 25 marks) in Part 'A'.

(b) **Part-B: -**Part-B will consist of two sub-sections i.e Section (1) and Section (II) as following: -

Part	Topic	No. of Questions	Marks (Each Question carries 1 mark)	Type of Questions	Part
B	(I)	Questions from the Subject (Annexure- 2)	60	60	MCQs (Multiple Choice Questions)
	(II)	Questions from General Knowledge, English, Logical Reasoning and Mental ability (Annexure- 3)	40	40	
	Total	**100**	**100**		

Note:-(i) There will be negative marking in Part-B. Each question carries 1 mark. For every wrong answer, 1/4thmark would be deducted. The question(s) not attempted will receive no credit or discredit.

(ii) The merit list of candidates, who will qualify Part-'A', will be prepared on the basis of marks secured by candidate in Part- B.

(iii) No candidate shall be eligible to be Skill test unless he/she obtains 40% marks in the Part –B Written competitive examination (read 35% for the candidates belonging to Schedules Caste of Punjab and Backward Classes of Punjab).

4. Tentative syllabus for the written examination for the recruitment of Junior Engineer (Civil/PHE)_ is annexed at Annexure-1,2 and 3.

Annexure-1 (Punjabi Syllabus)

Part-A (Punjabi Qualifying Exam)

1. ਜੀਵਨੀ ਅਤੇ ਰਚਨਾਵਾਂ ਨਾਲ ਸਬੰਧਤ ਪ੍ਰਸ਼ਨ :-

   ਸ੍ਰੀ ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਜੀ, ਸ੍ਰੀ ਗੁਰੂ ਅੰਗਦ ਦੇਵ ਜੀ, ਸ੍ਰੀ ਗੁਰੂ ਰਾਮਦਾਸ ਜੀ,

   ਸ੍ਰੀ ਗੁਰੂ ਅਰਜਨ ਦੇਵ ਜੀ, ਸ੍ਰੀ ਗੁਰੂ ਤੇਗ ਬਹਾਦਰ ਜੀ, ਸ੍ਰੀ ਗੁਰੂ ਗੋਬਿੰਦ ਸਿੰਘ ਜੀ।

2. ਵਿਰੋਧਾਰਥਕ ਸ਼ਬਦ, ਸਮਾਨਾਰਥਕ ਸ਼ਬਦ।
3. ਮੁਹਾਵਰੇ।
4. ਅਖਾਣ ।
5. ਸ਼ਬਦ ਦੇ ਭੇਦ।
6. ਅਗੇਤਰ/ਪਿਛੇਤਰ
7. ਵਚਨ ਬਦਲੇ ਤੇ ਲਿੰਗ ਬਦਲੋ।
8. ਵਿਸ਼ਰਾਮਚਿੰਨ੍ਹ।
9. ਸ਼ਬਦਾਂ / ਵਾਕਾਂ ਨੂੰ ਸ਼ੁੱਧ ਕਰਕੇ ਲਿਖੋ।
10. ਅੰਗਰੇਜੀ ਸ਼ਬਦਾਂ ਦਾ ਪੰਜਾਬੀ ਵਿੱਚ ਸ਼ੁੱਧ ਰੂਪ
11. ਅੰਕਾਂ, ਮਹੀਨੇ, ਦਿਨਾਂ ਦਾ ਸ਼ੁੱਧ ਪੰਜਾਬੀ ਰੂਪ।
12. ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਨਾਲ ਸਬੰਧਤ ਪ੍ਰਸ਼ਨ
13. ਪੰਜਾਬ ਦੇ ਇਤਿਹਾਸ ਨਾਲ ਸਬੰਧਤ ਪ੍ਰਸ਼ਨ
14. ਪੰਜਾਬ ਦੇ ਸਭਿਆਚਾਰ ਨਾਲ ਸਬੰਧਤ ਪ੍ਰਸ਼ਨ।

P R C
LUDHIANA

Annexure-2

Part B (I)- Syllabus for the Posts of Junior Engineer:

1) **ENGINEERING DRAWING:** Lettering Technique and Practice, Dimensioning Techniques (Necessity of dimensioning, method and principles of dimensioning etc.), Scales (need and importance of scales, Drawing of plain and diagonal scales etc.), Projections, Sections, Symbols and Conventions.

2) **SURVEYING:** Basic principles of surveying, Concept and purpose, Instruments used for taking these measurements etc., Chain surveying, Compass surveying, Levelling, Plane Table Surveying, Total Station Method, Auto Level, Contouring, Theodolite Surveying, Tacho-metric surveying, Digital Survey, Introduction to the use of Modern Surveying equipment and techniques,Total Stations etc.

3) **CONSTRUCTION MATERIALS& BUILDING CONSTRUCTION:** General characteristics of stones, Requirements of good building stones, Identification of common building stones, Bricks and Tiles, Cement (Various types of Cements, Properties of cement etc.), Lime, Timber and Wood Based Products, Paints and Varnishes, Miscellaneous Materials etc., Introduction to Building Construction, Foundation, Walls, Masonry, Arches and Lintels, Doors, Windows and Ventilators, Damp Proofing and Water Proofing, Floors, Roofs, Stairs, Anti Termite Measures, Building Planning etc. Concrete, uses of concrete in comparison to other building materials, Ingredients of Concrete, Properties of Concrete, proportioning for Normal Concrete, Introduction to Admixtures for improving performance of concrete, Special Concretes (Concreting under special conditions, difficulties and precautions before, during and after concreting, Ready mix concrete, Fibre reinforced concrete, Polymer Concrete, Fly ash concrete, Sillica fume concrete etc.), Concreting Operations (Storing of Cement, Storing of Aggregate, Batching, Mixing, Transportation of concrete, Placement of concrete,Compaction, Curing, Jointing, Defects in concrete etc.).

4) **STRUCTURAL ENGINEERING**: Introduction to I.S:456 (latest edition),Short and long column, load carrying capacity, effective length of column, lateral and helical ties. I.S. Specifications for reinforcement detailing. I.S. specifications for Reinforcement detailing method of design as per I.S. code.

5) **WATER SUPPLY AND WASTE WATER ENGINEERING: Water Supply-** Water requirement, Rate of demand and supply, Per capita consumption, Population Forecasting etc., Physical, Chemical and bacteriological properties, Standard of

potable water as per Indian Standard etc., Water Treatment including Sedimentation, Coagulation, flocculation, Filtration, disinfection of water, chlorination, Water treatment plants, R.O.s etc., Different types of pipes, fire hydrants, water meters their working and uses, Distribution system etc., Laying out Pipes

Waste Water Engineering-Definition of terms in sanitary engineering, Surface drains, Types of sewage, Sewerage, Laying and Construction of Sewers, Sewage characteristics (Properties of sewage as per IS standards), Natural Methods of Sewerage Disposal, Sewage Treatment, BOD, COD, Building Drainage (Different sanitary fittings and installations, Traps, seals, Testing of house drainage etc.), Drains and Sewers, Traps, inspection chamber, Septic Tank and Soak Pit, Bath room and W.C connections etc.

6) **TRANSPORTATION ENGINEERING**: Introduction of Transportation Engineering, Traffic Engineering, Road materials, Geometric design, Design of flexible and rigid. Pavements & Road maintenance.

7) **ENVIRONMENTAL ENGINEERING:** Importance of Environmental Engineering, Water Pollution (Causes lakes and its preventing measure, BIS standards for water quality etc.), Air Pollution, Noise Pollution, Effects of mining, blasting and deforestation, Land Use (land use and natural disasters, landslides etc.) soil degradation problems - erosion, water logging, soil pollution etc.), Environmental Impact Assessment, Legislation to Control Environmental Pollution (Indian legislative acts for water, land and air pollution control – provisions, scope and implementation etc.),Renewable Source of Energy etc.

8) **QUANTITY SURVEYING AND VALUATION**: Introduction to quantity surveying and its importance, duties of quantity surveyor, types of estimates, measurement, preparation of detailed and abstract, estimates from drawings, calculation of quantities of materials, analysis of rates, contractor ship, preparation of tender document based on Common Schedule of Rates (CSR).

9) **REPAIR AND MAINTENANCE OF BUILDINGS**: Need for maintenance, agencies causing deterioration (sources, causes, effects), investigation and diagnosis of defects, defects and their root causes, materials for repair, maintenance and protection, remedial measures for building defects, surface preparation techniques for repair, crack repair methods, repair of surface defects of concrete, repair of corrosion in RCC elements, repair of DPC against rising dampness, repair of walls, waterproofing of wet areas and roofs, repair of joints in buildings etc.

10) **CONSTRUCTION MANAGEMENT AND ACCOUNTS:** Construction Planning, CPM,

PERT, site organization, Construction Labour (Labour Welfare Fund Act 1936 (as amended), Payment of Wages Act 1936 (as amended), Minimum Wages Act 1948 (as amended), control of progress, inspection and quality control, accidents and safety in construction, accounts, public work accounts, request for quotation, bill of quantities, measurement book, indent book, material at site register.

11) BASICS OF MANAGEMENT: Introduction, Leadership, Motivation, Ethics and Values, Team related skills- sympathy, empathy, co-operation, concern, lead and negotiate, work well with people from culturally diverse background, Communication in group - conversation and listening skills, Task Initiation, Task Planning, Task execution, Task close out, Customer Relationship Management (CRM), Need, various types of customers, customer satisfaction, life- long customer, Customer Satisfaction Index (CSI) and its significance, Elementary knowledge of Income Tax, Sales Tax, Excise Duty, Provident Fund, Employees State Insurance Act, Labour welfare schemes, Labour laws, worker and public safety techniques, systems of wage payment, incentives, Factory Act 1948 with special reference to health, safety and welfare measures, working hours, annual leave with wages, Payment of Wages Act1936, Minimum Wages Act 1948, safeguards in construction practices, Introduction to Total Quality Management (TQM), Community Participation in Water Supply and Sanitation, Roll of Women in Water Supply and Sanitation etc.

Annexure-3

Part B(II)--General Knowledge, Logical Reasoning, Mental Ability, Computer & English:

Sr. No.	Indicative Contents of Syllabus	Weightage (Approx.)
1	**General Knowledge and Current affairs of State and National Importance including:** (I) Environment & Pollution issues, (II) Current Affairs, (III) Science and Technology, (IV) Economic issues, (V) History of India with special reference to Indian freedom struggle movement. (VI) Sports and Games.	**10**
2	**Logical Reasoning & Mental Ability:** Verbal reasoning: Coding, Decoding, Analogy, Classification, Series, Direction sense test, relations, mathematical operations, time test, odd man out problems. Non Verbal reasoning: Series, Analogy and Classification. Basic numerical skills, Percentage, Number system, LCM and HCF, Ratio and Proportion, Number series, Average, Problems based on Ages, Profit & Loss, Partnership and Mixture, Simple and Compound Interest, Work and Time, Time and Distance, Data Interpretation.	**10**
3	**Computer Basics:** MS Word – Word Processing, MS Excel – Spreadsheet, Operating System, MS PowerPoint Presentation, Computer Fundamentals, Computer Software, Internet & Mobile Usage.	**10**
4	**English:** Basic Grammar, Subject and Verb, Adjectives and Adverbs, Synonyms, Antonyms, One Word Substitution, Fill in the Blanks, Correction in Sentences, Idioms and their meanings, Spell Checks, Adjectives, Articles, Prepositions, Direct and Indirect Speech, Active and Passive Voice, Correction in Sentences, etc.	**10**
	Maximum Marks	**40**

Note:-a) The distribution of marks/question in each section is indicative. It may vary slightly.

b) The syllabus is broadly classified as above but may vary to some extent.