

## **Syllabus for the post of Junior Engineer (Civil)**

**Test Type: Written Exam (Multiple Choice Question)**

**Test Period: 90 Minutes**

**Total Marks: 100**

There will be .25(point 25) negative marking per question for each wrong attempt.

<b>Subject</b>	<b>Topic</b>	<b>Weightage</b>
General English	<ul style="list-style-type: none"><li>▪ Comprehension, One word substitution, Synonyms and Antonyms,</li><li>▪ Spelling error, Spotting error in sentences,</li><li>▪ Grammar Noun, Pronoun, Adjective, Verb, Preposition, Conjunction,</li><li>▪ Use of 'A', 'AN' and 'THE',</li><li>▪ Idioms and Phrases</li></ul>	5 Questions each 1 mark [5]
General Knowledge	<ul style="list-style-type: none"><li>▪ Indian History, Indian Geography, Indian Economy, Indian Polity &amp; Constitution,</li><li>▪ Scientific Research, awards,</li><li>▪ Sports,</li><li>▪ Current Affairs-India &amp; World</li></ul>	8 Questions each 1 mark [8]
Logical Reasoning	<ul style="list-style-type: none"><li>▪ Analogies – Semantic Analogy, Symbolic / Number Analogy, Figural Analogy,</li><li>▪ Similarities and differences, word building, relation concepts,</li><li>▪ Arithmetic number series, Semantic Series, Number Series,</li><li>▪ Coding and Decoding – small &amp; Capital Letters / numbers coding, decoding and classification</li></ul>	7 Questions each 1 mark [7]
Quantitative Aptitude	<ul style="list-style-type: none"><li>▪ Number System,</li><li>▪ Time and Work,</li><li>▪ Averages, Percentages,</li><li>▪ Profit and loss,</li><li>▪ Ratio and Proportions,</li><li>▪ Simple and Compound Interest, Time and Distance</li></ul>	10 Questions each 1 mark [10]
Computer Literacy	<ul style="list-style-type: none"><li>▪ Characteristics of Computer, Computer Organisation including RAM, ROM, File System, Input Devices,</li><li>▪ Computer Software – Relationship between Hardware and Software,</li><li>▪ Operating System, MS-Office (exposure of Word, Excel/spread sheet, Power point),</li><li>▪ Digital Signatures, Application of information technology in Government for E- Governance</li></ul>	5 Questions each 1 mark [5]

<b>Subject</b>	<b>Topic</b>	<b>Weightage</b>
Estimating, Costing and Valuation	<ul style="list-style-type: none"><li>▪ Estimate, glossary of technical terms, analysis of rates, methods and unit of measurement,</li><li>▪ Items of work – Earthwork, RCC work, Shuttering,</li><li>▪ Centre line method, Mid-section formula, Trapezoidal formula,</li><li>▪ Simpson’s rule.</li><li>▪ Valuation – Value and cost, scrap value, salvage value, assessed value, sinking fund, depreciation and obsolescence, methods of valuation.</li></ul>	5 Questions each 1 mark [5]
Surveying	<ul style="list-style-type: none"><li>▪ Principles of surveying, measurement of distance, chain surveying, working of prismatic compass,</li><li>▪ compass traversing, bearings, local attraction,</li><li>▪ plane table surveying, theodolite traversing, adjustment of theodolite, Levelling,</li><li>▪ Definition of terms used in levelling, contouring, curvature and refraction corrections,</li><li>▪ temporary and permanent adjustments of survey instruments,</li><li>▪ methods of contouring, uses of contour map,</li><li>▪ tachometric survey, curve setting, earth work calculation, advanced surveying equipment e.g. Total Station, DGPS, GPS etc.</li><li>▪ Use of Remote Sensing Techniques in planning of WR projects</li></ul>	20 Questions each 1 mark [20]
Geotechnical Engineering	<ul style="list-style-type: none"><li>▪ Soil Type and structure – gradation and particle size distribution – consistency limits.</li><li>▪ Properties of soils, classification and interrelationship;</li><li>▪ Compaction behaviour, methods of compaction and their choice,</li><li>▪ Laboratory and field tests, Earth pressure theory and analysis for retaining walls,</li><li>▪ Bearing capacity of soil - stability of slope of earth walk.</li><li>▪ Type and properties of Rocks including laboratory and field testing.</li></ul>	4 Questions each 1 mark [4]
Foundation Engineering	<ul style="list-style-type: none"><li>▪ Types of foundations,</li><li>▪ Selection criteria for foundation of structures, bearing capacity, settlement,</li><li>▪ Types of piles and their layout.</li><li>▪ Foundations on expansive soils, foundation on swelling soils.</li></ul>	4 Questions each 1 mark [4]

<b>Subject</b>	<b>Topic</b>	<b>Weightage</b>
Hydraulics	<ul style="list-style-type: none"><li>▪ Fluid properties,</li><li>▪ hydrostatics,</li><li>▪ measurements of flow,</li><li>▪ Bernoulli's theorem and its application, flow through pipes,</li><li>▪ flow in open channels,</li><li>▪ weirs, flumes, spillways, pumps and turbines</li></ul>	4 Questions each 1 mark [4]
Irrigation Engineering	<ul style="list-style-type: none"><li>▪ Definition, necessity, benefits, effects of irrigation, types and methods of irrigation,</li><li>▪ Water requirement of crops, duty, delta and base period, Kharif and Rabi Crops, Command area, Time factor, Crop ratio, Overlap allowance, Irrigation efficiencies.</li><li>▪ Different type of canals, types of canal irrigation, canal capacity, canal losses, alignment of main and distributory canals,</li><li>▪ Canal lining – types and advantages.</li><li>▪ Canal structures: Description of head regulators, canal falls, aqueducts, metering flumes and canal outlets.</li><li>▪ Diversion headwork: Description of weirs of permeable and impermeable foundation, Silt and Scour, Kennedy's theory of critical velocity, Lacey's theory of uniform flow.</li><li>▪ Storage works: Types of dams.</li><li>▪ Spillways: Spillway types, energy dissipation.</li></ul>	15 Questions each 1 mark [15]
Concrete Technology	<ul style="list-style-type: none"><li>▪ Properties, Advantages and uses of concrete,</li><li>▪ Cement aggregates, importance of water quality, water cement ratio, workability, mix design, storage, batching, mixing, placement, compaction, finishing and curing of concrete,</li><li>▪ Quality control of concrete, hot weather and cold weather concreting,</li></ul>	3 Questions each 1 mark [3]
Hydrology	<ul style="list-style-type: none"><li>▪ Measurement of rainfall, rain gauge and related data analysis e. g. Rainfall – Runoff analysis, Thiessen polygon,</li><li>▪ PMP, precipitation, Evaporation and transpiration,</li><li>▪ Overland flow, unit and synthetic hydrograph,</li><li>▪ Floods and their management, flood frequency analysis etc.</li></ul>	10 Questions each 1 mark [10]

## **Syllabus for the post of Junior Accounts Officer**

**Test Type: Written Exam (Multiple Choice Question)**

**Test Period: 90 Minutes**

**Total Marks: 100**

There will be .25(point 25) negative marking per question for each wrong attempt.

<b>Subject</b>	<b>Topic</b>	<b>Weightage</b>
General English	Vocabulary, Shuffling of sentence elements, Sentence Rearrangement, One phrase substitutions, Sentence construction, Comprehension, Error Correction, Fill within the Blanks, Synonyms, Antonyms, Grammar, Unseen Passages Idioms & Phrases, Topic-Verb Settlement. And so forth.	10 Questions each 01 Mark [10]
Arithmetic	Number system, HCF, LCM, Simplification, Decimal Fractions, Ratio and Proportions, Unitary Method, Percentage, Time and Distance, Time and Work, Profit and Loss, Average, Simple and Compound Interest, Menstruation (2 D and 3 D), Algebra, Data Interpretation.	20 Questions each 01 Mark [20]
Advance Accounting	Relationship of Finance to Accounting and Audit, The organization of Finance Function, Goals of Financial Management, Key activities of Financial Management, Analyzing financial performance, Financial ratios, Applications of financial analysis, Problems in financial statements and analysis, Trading and Profit & Loss account and Balance sheets, Bills of Exchange, Self Balancing Ledger and Sectional Balancing, Capital & Revenue, Receipts and Payment, Income and Expenditure, Branch and Departmental Accounts, Double Entry System, Rectification of Errors, Balance Sheets format and Classification. Trial Balance, Depreciation on Fixed Assets, Internal Audit of Accounts.	30 Questions each 01 Mark [30]
Auditing and Income Tax	The object of Audit, Verification and vouching, Rights, Duties and Liabilities of Auditors, Income Tax, Provisions about income from salary and Provisions related to Chapter –IV of Income Tax Act 1961.	20 Questions each 01 Mark [20]
<b>Subject</b>	<b>Topic</b>	<b>Weightage</b>

General Studies	General Science, India's history, Indian National Movement, Indian Politics, Economy & Culture, Indian agriculture, Commerce and Trade & Population, Ecology and urbanization, World Geography, India's Geological & Natural Resources, The current national, main international events.	10 Question each 01 Mark [10]
Computer Literacy	Characteristics of Computer, computer Organization including RAM, ROM, File System, Input Devices, Computer Software. Relationship between Hardware and Software Operating System, MS- Office (exposure of Work, Excel / spread sheet, Power point), Tally Package and M.S. Excel Computer Application in Accounting, Digital Signatures, Application of information technology in government for E-governance.	10 Questions each 01 Mark [10]

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**Syllabus for the post of Draftsman Grade III (Civil)****Test Type: Written Exam (Multiple Choice Question)****Test Period: 90 Minutes****Total Marks: 100**

There will be .25(point 25) negative marking per question for each wrong attempt.

Subject	Topic	Weightage
General English  General Hindi	Vocabulary, Shuffling of sentence elements, Sentence Rearrangement, One phrase substitutions, Sentence construction, Comprehension, Error Correction, Fill within the Blanks, Synonyms, Antonyms, Grammar, Unseen Passages Idioms & Phrases, Topic-Verb Settlement. And so forth. OR गद्यशांश आधारित प्रश्न तत्सम, तद्वच, पर्यायवाची, वलोम, मुहावरे और लोकोक्तियाँ, शुद्ध- अशुद्धवाक्य, सं ध- वच्छेद, अंलकार और समास, वचन, लंग, अनेकार्थी और वाक्य के लए एक शब्द	20 Questions each 01 mark[20]
Draftsman (Civil) <b>Subject Specific</b>	Question on ITI Draughtsman (Civil) Trade syllabus and practical application of the Subject, CAD designing, CAD Designing Software, Features of CAD software, 2D and 3D sketching, and other designing software.	30 Questions each 01 mark[30]
Arithmetic	Number system, HCF, LCM, Simplification, Decimal Fractions, Ratio and Proportions, Unitary Method, Percentage, Time and Distance, Time and Work, Profit and Loss, Average, Simple and Compound Interest, Menstruation (2 D and 3 D), Algebra, Data Interpretation.	20 Questions each 01 mark[20]
General Studies	General Science, India's history, Indian National Movement, Indian Politics, Economy & Culture, Indian agriculture, Commerce and Trade & Population, Ecology and urbanization, World Geography, India's Geological & Natural Resources, The current national, main international events.	10 Questions each 01 mark[10]

Reasoning	decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Classification, Symbolic/ Number Classification, Figural Classification, Semantic Series, Number Series, Figural Series, Problem Solving, Word Building, Coding & de-coding, Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing inferences, Punched hole/ pattern – folding & un-folding, Figural Pattern – folding and completion, coding, decoding and classification, Embedded Figures, Critical thinking, Emotional Intelligence, Social Intelligence and other sub-topics.	10 Questions each 01 mark[10]
Computer Literacy	Characteristics of Computer, Computer Organization including RAM, ROM, File each 01 Mark System, Input Devices, Computer Software. [20] Relationship between Hardware and Software  Operating System, MS- Office (exposure of Word, Excel / spread sheet, Power point), Tally Package and M.S. Excel Computer Application in Accounting, Digital Signatures, Application of information technology in government for E-governance.	10 Questions each 01 mark

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## **Syllabus for the post of Upper Division Clerk (UDC)**

**Test Type: Written Exam (Multiple Choice Question)**

**Test Period: 90 Minutes**

**Total Marks: 100**

There will be .25(point 25) negative marking per question for each wrong attempt.

<b>Subject</b>	<b>Topic</b>	<b>Weightage</b>
General English	Comprehension, One word substitution, Synonyms and Antonyms, Spelling error, Spotting error in sentences, Grammar Noun, Pronoun, Adjective, Verb, Preposition, Conjunction, Use of 'A', 'AN' and 'THE', Idioms and Phrases  <b>OR</b>	20 Questions each 01 mark [20]
General Hindi	गद्यांश आधारित प्रश्न तत्सम, तद्वच, पर्यायवाची, विलोम, मुहावरे और लोकोत्तियाँ, शुद्ध – अशुद्धवाक्य, संधि– विच्छेद, अलंकार और समास, वचन, लिंग, अनेकार्थी और वाक्य के लिए एक शब्द	
General Knowledge	India History, Indian Geography, Indian Economy, Indian Polity & Constitution, Scientific Research, awards, Sports, Current Affairs-India & World	20 Questions each 01 mark [20]
Logical Reasoning	Analogies – Semantic Analogy, Symbolic/ Number Analogy, Figural Analogy, Symbolic/ Number Analogy, Figural Analogy, Similarities and differences, word building, relation concepts, Arithmetic number series, Semantic Series, Number Series, Coding and Decoding- small & Capital Letters/numbers coding, decoding and classification	15 Questions each 01 mark [15]
Computer Literacy	Characteristics of Computer, Computer Organisation including RAM, ROM, File System, Input Devices, Computer Software-Relationship between Hardware and Software, Operating System, MS-Office (exposure of Word, Excel/spread sheet, Power point), Information Technology and Society- Indian IT Act, Digital Signatures, Application of information technology in Government for E- Governance mobile/Smartphone's Information Kiosks	20 Questions each 01 mark [20]



<b>Subject</b>	<b>Topic</b>	<b>Weightage</b>
Quantitative Aptitude	Number system, HCF, LCM, Simplification, Decimal Fractions, Ratio and Proportions, Unitary Method, Percentage, Time and Distance, Time and Work, Profit and Loss, Average, Simple and Compound Interest, Menstruation (2 D and 3 D), Algebra, Data Interpretation.	25 Questions each 01 mark [25]

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## **Syllabus for the post of Stenographer Grade-II**

**Test Type: Written Exam (Multiple Choice Question)**

**Test Period: 90 Minutes**

**Total Marks: 100**

There will be .25(point 25) negative marking per question for each wrong attempt.

<b>Subject</b>	<b>Topic</b>	<b>Weightage</b>
General English  General Hindi	Comprehension, One word substitution, Synonyms and Antonyms, Spelling error, Spotting error in sentences, Grammar Noun, Pronoun, Adjective, Verb, Preposition, Conjunction, Use of 'A', 'AN' and 'THE', Idioms and Phrases  <b>OR</b>  गद्यांश आधारित प्रश्न तत्सम, तद्वच, पर्यायवाची, विलोम, मुहावरे और लोकोत्थियाँ, शुद्ध – अशुद्धवाक्य, संधि-विच्छेद, अलंकार और समास, वचन, लिंग, अनेकार्थी और वाक्य के लिए एक शब्द	20 Questions each 01 mark [20]
General Knowledge	India History, Indian Geography, Indian Economy, Indian Polity & Constitution, Scientific Research, awards, Sports, Current Affairs-India & World	20 Questions each 01 mark [20]
Logical Reasoning	Analogies – Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Symbolic/ Number Analogy, Figural Analogy, Similarities and differences, word building, relation concepts, Arithmetic number series, Semantic Series, Number Series, Coding and Decoding- small & Capital Letters/numbers coding, decoding and classification	20 Questions each 01 mark [20]

<b>Subject</b>	<b>Topic</b>	<b>Weightage</b>
Computer Literacy	Characteristics of Computer, Computer Organization including RAM, ROM, File System, Input Devices, Computer Software-Relationship between Hardware and Software, Operating System, MS-Office (exposure of Word, Excel/spread sheet, Power point), Information Technology and Society- Indian IT Act, Digital Signatures, Application of information technology in Government for E-Governance mobile/Smartphone's Information Kiosks	20 Questions each 01 mark [20]
Quantitative Aptitude	Number system, HCF, LCM, Simplification, Decimal Fractions, Ratio and Proportions, Unitary Method, Percentage, Time and Distance, Time and Work, Profit and Loss, Average, Simple and Compound Interest, Menstruation (2 D and 3 D), Algebra, Data Interpretation.	20 Questions each 01 mark [20]

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## **Syllabus for the post of Lower Division Clerk**

**Test Type: Written Exam (Multiple Choice Question)**

**Test Period: 90 Minutes**

**Total Marks: 100**

There will be .25(point 25) negative marking per question for each wrong attempt.

<b>Subject</b>	<b>Topic</b>	<b>Weightage</b>
General English	Comprehension, One word substitution, Synonyms and Antonyms, Spelling error, Spotting error in sentences, Grammar Noun, Pronoun, Adjective, Verb, Preposition, Conjunction, Use of 'A', 'AN' and 'THE', Idioms and Phrases	20 Questions each 01 mark [20]
General Hindi	गद्यांश आधारित प्रश्न तत्सम, तद्वच, पर्यायवाची, विलोम, मुहावरे और लोकोत्तियाँ, शुद्ध – अशुद्धवाक्य, संधि– विच्छेद, अलंकार और समास, वचन, लिंग, अनेकार्थी और वाक्य के लिए एक शब्द	
General Knowledge	India History, Indian Geography, Indian Economy, Indian Polity & Constitution, Scientific Research, awards, Sports, Current Affairs-India & World	20 Questions each 01 mark [20]
Logical Reasoning	Analogies – Semantic Analogy, Symbolic/ Number Analogy, Figural Analogy, Symbolic/ Number Analogy, Figural Analogy, Similarities and differences, word building, relation concepts, Arithmetic number series, Semantic Series, Number Series, Coding and Decoding- small & Capital Letters/numbers coding, decoding and classification	20 Questions each 01 mark [20]
Computer Literacy	Characteristics of Computer, Computer Organisation including RAM, ROM, File System, Input Devices, Computer Software-Relationship between Hardware and Software, Operating System, MS-Office (exposure of Word, Excel/spread sheet, Power point), Information Technology and Society- Indian IT Act, Digital Signatures, Application of information technology in Government for E- Governance mobile/Smartphone's Information Kiosks	20 Questions each 01 mark [20]
<b>Subject</b>	<b>Topic</b>	<b>Weightage</b>

Quantitative Aptitude	Number system, HCF, LCM, Simplification, Decimal Fractions, Ratio and Proportions, Unitary Method, Percentage, Time and Distance, Time and Work, Profit and Loss, Average, Simple and Compound Interest, Mensuration (2 D and 3 D), Algebra, Data Interpretation.	20 Questions each 01 mark [20]
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