

SYLLABUS FOR THE POST OF EXECUTIVE ENGINEER (CIVIL)

Section-A

70 Marks

- (i) Building Materials and Construction- Stones, Timber, Bricks, Cement, Mortar, Concrete, Masonry, Steel.
- (ii) Solid Mechanics- Stresses, Strains, Failures, Theories of Solid Material, Simple Bending and Torsion Theories, Shear Centre.
- (iii) Graphic Static- Force Polygon, Stress diagram.
- (iv) Structural Analysis - Analysis of trusses and frames, Introduction to plastic Analysis.
- (v) Design of Metal Structure - Working stress and ultimate strength design of simple structures.
- (vi) Design of Concrete and Masonry Structures- Design of masonry walls, working stress design of plain, reinforced and prestressed concrete, ultimate strength design of reinforced and prestressed concrete.
- (vii) Fluid Mechanics, Water Resources Engineering –Open channel and pipe flow. Hydrology Design of canals and hydraulics structures.
- (viii) Soil Mechanics and Foundation Engineering and their general principles. Strength parameters, Earth pressures Theories, Design of Shallow and Deep foundations.
- (ix) Transportation Engineering including Railway Engineering and Surveying, Roads Super-elevation, Ruling gradient pavements, Traffic controls, Design Considerations.
- (x) Environmental Engineering – Water purifications, Sewerage treatment and disposal.
- (xi) Construction Planning and Management - Elements of construction practice. Bar charts, CPM, PERT.

Section- B

30 Marks

General English of Graduation Level

Verb, Subject-Verb Agreement, Error Correction, Tenses, Sentence Rearrangement, Adverb, Comprehension, Articles, Grammar, Fill in the Blanks, Unseen Passages, Synonyms, Vocabulary, Idioms & Phrases, Antonyms etc, Proficiency in Hindi and English Language including Translation from English to Hindi & Hindi to English.

General Aptitude

Number System, Percentages, Decimal & Fractions, Average, Simplification, Problems on Ages, Profit and Loss, Time and Work, Ratio and Proportions, Time and Distance, HCF & LCM, Simple & Compound Interest, Data Interpretation etc. Number Series, Coding-Decoding, Non-Verbal Series, Number Ranking, Alphabet Series, Directions, Analogy, Arithmetical Reasoning, Blood Relations, Decision Making, Mirror Images, Clocks & Calendars, Cubes and Dice, Embedded Figures etc.

General Knowledge including fundamental knowledge of computers and Awareness about Haryana

Questions will be designed to test the ability of the candidate's General Knowledge viz. General Science and Technology, computer and its application, Internet, current events of national and international importance, Constitution of India, Indian Freedom struggle, Indian History, Indian Geography, Important Financial & Economic policy, Budget, Sports, International and National Organizations and General Awareness about Haryana etc.