

SSC JE Syllabus 2026

Staff Selection Commission — Junior Engineer — Civil, Mechanical & Electrical

Vacancies	Announced yearly for Junior Engineer posts in CPWD, MES, Railways, CWC and other central departments
Age Limit	Generally up to 32 years (varies by post & department; check post-wise notification)
Qualification	Diploma or Degree in the relevant engineering discipline (Civil/Mechanical/Electrical) from a recognised institute
Application Fee	■100 (General/OBC/EWS male candidates). Women and SC/ST/PwD/ESM candidates are exempted.
Official Website	ssc.gov.in
Last Reviewed	11 Apr 2026

Overview

SSC JE recruits diploma/degree engineers as Junior Engineers across departments like CPWD, the Military Engineer Services, various Railway zones and the Central Water Commission. Unlike most SSC exams, the syllabus is discipline-specific — candidates are examined only in the branch (Civil, Mechanical or Electrical) that matches their qualification — and Paper II is a descriptive, conventional-type paper rather than an MCQ test, which rewards depth of core-subject understanding over speed-based test-taking.

What's New in the 2026 Cycle

- Paper I is a common, general-aptitude-plus-technical MCQ test; Paper II is a discipline-specific descriptive/conventional paper.
- Syllabus depth in Paper II mirrors diploma/degree-level core engineering subjects, not just objective-test tricks.
- No PET/PST requirement — selection is purely written-exam and document-verification based.
- Document Verification checks the specific engineering discipline certificate matches the post applied for.

Exam Pattern

Paper I (Computer-Based Test)

Mode: Online, objective MCQ | Duration: 2 hours

Section	Questions	Marks
General Intelligence & Reasoning	50	50
General Awareness	50	50
General Engineering (Civil/Mechanical/Electrical, as applicable)	100	100

Negative marking: 0.25 mark deducted per wrong answer (in the technical section; check notification for General Awareness section) |

Nature: Qualifying for Paper II; also used in preparing the merit list along with Paper II.

Paper II (Descriptive / Conventional Type)

Mode: Offline/online descriptive, discipline-specific | Duration: 2 hours

Section	Questions	Marks
Discipline-specific General Engineering (Civil/Mechanical/Electrical)	—	300

Negative marking: Not applicable — descriptive/conventional paper | **Nature:** Merit-determining, combined with Paper I score.

SSC JE — Detailed Subject-Wise Syllabus

General Intelligence & Reasoning

A smaller-weightage section relative to the technical papers — useful but not where most preparation time should go.

- Analogy & similarities
- Spatial visualisation
- Problem-solving & analysis
- Arithmetic & figural classification
- Coding-decoding
- Judgement & decision making

General Awareness

Broad current-affairs section; keep it light-touch given the technical syllabus is the real differentiator.

- Current affairs — national & international
- India & neighbouring countries
- History, culture & geography
- Economic scene & general polity
- General science basics

General Engineering — Civil (Paper I & II)

Mirrors a standard civil engineering diploma/degree curriculum — revise core textbooks rather than relying only on MCQ banks.

- Building materials & construction
- Estimating, costing & valuation
- Surveying
- Soil mechanics & foundation engineering
- Hydraulics & irrigation engineering
- Concrete technology & RCC design
- Steel structure design
- Transportation & environmental engineering

General Engineering — Mechanical (Paper I & II)

Covers core mechanical subjects at a diploma/degree depth — thermal and design topics carry particularly heavy weight.

- Theory of machines & machine design
- Engineering mechanics & strength of materials
- Thermal engineering — IC engines, refrigeration & air conditioning
- Fluid mechanics & hydraulic machines
- Production engineering & industrial management
- Metrology & measurement

General Engineering — Electrical (Paper I & II)

Power systems and machines dominate the weightage — build strong fundamentals in circuit theory first.

- Basic concepts of electrical circuits
- Circuit law, magnetic circuit
- AC fundamentals & measurement
- Electrical machines — transformers, motors, generators
- Power systems, generation, transmission & distribution
- Estimation & costing
- Utilisation of electrical energy & basic electronics

Selection Process

- 1 Paper I — Computer-Based Test (general + discipline-specific technical MCQs).

- 2 Paper II — Descriptive/conventional discipline-specific paper.
- 3 Document Verification, including verification of the engineering discipline certificate.
- 4 Final merit list based on combined Paper I and Paper II scores.

Salary & Job Profile

Junior Engineer posts are placed in Pay Level 6 (■35,400–■1,12,400) of the 7th CPC matrix, with Dearness Allowance, HRA and Transport Allowance added depending on the recruiting department and posting location.

Best Books for Preparation

- SSC JE Civil Engineering — Made Easy Publications (discipline-specific equivalent for Mechanical/Electrical)
- Objective General English — S.P. Bakshi (Arihant)
- A Modern Approach to Verbal & Non-Verbal Reasoning — R.S. Aggarwal
- Lucent's General Knowledge

Previous Cut-off Trends (Approximate)

SSC JE cut-offs vary significantly by discipline (Civil/Mechanical/Electrical) and department-wise vacancy distribution, since Paper I and Paper II are both discipline-specific in the technical sections. Historical Paper I cut-offs have ranged roughly from 90 to 130 out of 200 for unreserved candidates depending on discipline and year — always check the discipline-wise official cut-off list.

Preparation Tips

- Because Paper II is descriptive, practise writing full technical answers with diagrams, not just solving MCQs.
- Revise your core diploma/degree textbooks for the discipline-specific portion — SSC JE technical questions closely track standard engineering curricula.
- Keep the General Awareness and Reasoning sections light-touch but consistent, since the bulk of scoring differentiation happens in the technical sections.
- Practise previous years' Paper II conventional questions under time pressure — descriptive answers are easy to run long on if unpractised.

Exam Day Guidelines

- Carry your Admit Card, a valid original photo ID, and be ready to show your engineering discipline certificate at the document verification stage.
- For Paper II, carry your own geometry box and pens/pencils as permitted, since it's a descriptive paper requiring diagrams.
- Reach the centre early — technical posts often have smaller, more spread-out exam centres than general SSC exams.
- Revise standard diagram conventions and labelling practices, since presentation quality affects Paper II evaluation.

Frequently Asked Questions

Is SSC JE syllabus the same for all engineering branches?

No. The General Intelligence, Reasoning and General Awareness portions of Paper I are common, but the technical sections of both Paper I and Paper II are specific to your discipline — Civil, Mechanical or Electrical.

Is Paper II of SSC JE objective or descriptive?

Paper II is a descriptive/conventional-type paper, unlike most other SSC exams which are fully objective MCQ-based.

Is there negative marking in SSC JE?

Yes, in the technical/general sections of Paper I (typically 0.25 marks per wrong answer per the current notification); Paper II, being descriptive, does not use MCQ-style negative marking.

What qualification is required for SSC JE?

A relevant diploma or degree in Civil, Mechanical or Electrical Engineering from a recognised institute, as specified for each post in the notification.

Is there a physical test in SSC JE?

No, SSC JE selection is entirely based on the two written papers followed by document verification — there is no PET/PST requirement.

Compiled and reviewed by Syllabus Hub against the official Staff Selection Commission notification as of 11 Apr 2026. Exam patterns, vacancies and dates are subject to change — always cross-check with the official notification at ssc.gov.in before applying. © 2026 Syllabus Hub.