

4.2 The Stage-III will consist of Personality Test carrying 200 Marks.

5.1 Candidates who obtain such minimum qualifying marks in the Stage-I: Engineering Services (Preliminary/Stage-I) and Stage-II: Engineering Services (Main/Stage-II) Examination as may be fixed by the Commission as per its discretion, shall be summoned by them for Stage-III (Personality Test). The number of candidates to be summoned for Personality Test will be about twice the number of vacancies to be filled. The Personality Test will carry 200 marks (with no minimum qualifying marks).

5.2 Marks obtained by the candidates in the Stage-I:(Preliminary/Stage-I) Examination, Stage-II:(Main/Stage-II) Examination and Stage-III (Personality Test) would determine their final ranking. Candidates will be allotted to the various services keeping in view their ranks in the examination and the preference expressed by them for the various services/posts.

6. Candidates are advised to read carefully special instructions to candidates for conventional type tests and objective type tests given in Appendix-III (Part A and Part B) including the procedure regarding filing in the Answer Sheet of objective type tests in the Examination Notice uploaded on the Commission's website (www.upsc.gov.in) on **06.09.2023**

7. In the Personality Test special attention will be paid to assessing the candidate's capacity for leadership, initiative and intellectual curiosity, tact and other social qualities, mental and physical energy, powers of practical application and integrity of character.

8. Conventional papers must be answered in English. Question paper will be set in English only.

9. Details of the syllabi for Stage-I: (Preliminary/stage-I) and Stage-II :(Main/Stage-II) are at Section III.

Section-II

A. Stage-I(Preliminary/Stage-I) Examination :-

The Examination shall comprise of two papers.

Subject	Duration	Maximum Marks
Category-I Civil Engineering		
Paper-I (General Studies and Engineering Aptitude)	2 hrs.	200
Paper-II (Civil Engineering)	3 hrs.	300
Total		500

Subject	Duration	Maximum Marks
Category-II Mechanical Engineering		
Paper-I (General Studies and Engineering Aptitude)	2 hrs.	200
Paper-II (Mechanical Engineering)	3 hrs.	300
Total		500

Subject	Duration	Maximum Marks
Category-III Electrical Engineering		

Paper-I (General Studies and Engineering Aptitude)	2 hrs.	200
Paper-II (Electrical Engineering)	3 hrs.	300
Total		500

Subject	Duration	Maximum Marks
Category-IV Electronics and Telecommunication Engineering		
Paper-I (General Studies and Engineering Aptitude)	2 hrs.	200
Paper-II (Electronics and Telecommunication Engineering)	3 hrs.	300
Total		500

(iii) Details of the syllabi are indicated in Section III.

B. Stage-II(Main/Stage-II) Examination:-

The Examination shall comprise of two papers.

Subject	Duration	Maximum Marks
Category-I Civil Engineering		
Paper-I (Civil Engineering)	3 hrs.	300
Paper-II (Civil Engineering)	3 hrs.	300
Total		600

Subject	Duration	Maximum Marks
Category-II Mechanical Engineering		
Paper-I (Mechanical Engineering)	3 hrs.	300
Paper-II (Mechanical Engineering)	3 hrs.	300
Total		600

Subject	Duration	Maximum Marks
Category-III Electrical Engineering		
Paper-I (Electrical Engineering)	3 hrs.	300
Paper-II (Electrical Engineering)	3 hrs.	300

Total	600
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Subject	Duration	Maximum Marks
Category-IV Electronics and Telecommunication Engineering		
Paper-I (Electronics and Telecommunication Engineering `)	3 hrs.	300
Paper-II (Electronics and Telecommunication Engineering)	3 hrs.	300
Total		600

(C) Stage-III(Personality Test) - 200 Marks.

Note 1: Candidates must write the papers in their own hand. In no circumstances will they be allowed the help of a scribe to write the answers for them. The Persons with Benchmark Disabilities in the categories of **Low Vision** will be provided the facility of scribe, if desired by the person. In case of other category of Persons with Benchmark Disabilities as defined under section 2(r) of RPwD Act, 2016, the facility of scribe will be allowed to such candidates on production of a certificate to the effect that the person concerned has physical limitation to write, and scribe is essential to write examination on behalf, from the Chief Medical Officer, Civil Surgeon/Medical Superintendent of a Government Health Care institution as per proforma at Appendix-IV.

Further, for persons with specified disabilities covered under the definition of Section 2(s) of the RPwD Act, 2016 but not covered under the definition of Section 2(r) of the said Act, i.e. persons having less than 40% disability and having difficulty in writing will be provided the facility of scribe subject to production of a certificate to the effect that person concerned has limitation to write and that scribe is essential to write examination on his/her behalf from the competent medical authority of a Government healthcare institution as per proforma at Appendix-VI.

Note 2: The candidates have discretion of opting for his/her own scribe or request the Commission for the same. The details of scribe i.e. whether own or the Commission's and the details of scribe in case candidates are bringing their own scribe, will be sought at the time of filling up the application form online as per proforma at Appendix-V.

Note 3: The qualification of the Commission's scribe as well as own scribe not be more than the minimum qualification criteria of the examination. However, the qualification of the scribe should always be matriculate or above.

Note 4: The Persons with Benchmark Disabilities in the category of **Low Vision** will be allowed Compensatory Time of twenty minutes per hour of the examination. In case of other categories of Persons with Benchmark Disabilities, the facility will be provided on production of a certificate to the effect that the person concerned has physical limitation to write, from the Chief Medical Officer/Civil Surgeon/Medical Superintendent of a Government Health Care institution as per proforma at Appendix-IV.

Further, for persons with specified disabilities covered under the definition of Section 2(s) of the RPwD Act, 2016 but not covered under the definition of Section 2(r) of the said Act, i.e. persons having less than 40% disability and having difficulty in writing will be provided compensatory time subject to production of a certificate to the effect that person concerned has limitation to write from the competent medical authority of a Government healthcare institution as per proforma at Appendix-VI.

Note 5: The eligibility conditions of a scribe, his/her conduct inside the examination hall and the manner in which and extent to

which he/she can help the Persons with Benchmark Disabilities(PwBD) candidates in writing the Engineering Services Examination shall be governed by the instructions issued by the UPSC in this regard. Violation of all or any of the said instructions shall entail the cancellation of the candidature of the PwBD candidate in addition to any other action that the UPSC may take against the scribe.

2. The Commission have discretion to fix minimum qualifying marks in any or all the papers of the examination.
3. Marks will not be allotted for mere superficial knowledge.
4. Deduction upto five per cent of the maximum marks for the written papers will be made for illegible handwriting.
5. Credit will be given for orderly, effective and exact expression combined with due economy of words in the conventional papers of the examination.
6. In the question papers, wherever required, SI units will be used.

Note.—Candidates will be supplied with standard tables/charts in SI units in the Examination hall for reference purpose, wherever considered necessary.

7. Candidates are permitted to bring and use battery operated pocket calculators for conventional (essay) type papers only. Loaning or inter-changing of calculators in the Examination Hall is not permitted.

It is also important to note that candidates are not permitted to use calculators for answering objective type papers (Test booklets). They should not therefore, bring the same inside the Examination Hall.

8. Candidates should use only International form of Indian numerals (e.g., 1, 2, 3, 4, 5 etc.) while answering question papers.

Section-III **Standard and Syllabi**

The standard of paper in General Studies and Engineering Aptitude (Preliminary Stage-I Examination) will be such as may be expected of an Engineering/Science Graduate. The standard of papers in other subjects will approximately be that of an Engineering Degree Examination of an Indian University. There will be no practical examination in any of the subjects.

General Studies and Engineering Aptitude (Preliminary Examination/Stage-I, Paper I, Objective type, Common to all Candidates)

1. Current issues of national and international importance relating to social, economic and industrial development
2. Engineering Aptitude covering Logical reasoning and Analytical ability
3. Engineering Mathematics and Numerical Analysis
4. General Principles of Design, Drawing, Importance of Safety
5. Standards and Quality practices in production, construction, maintenance and services
6. Basics of Energy and Environment: Conservation, environmental pollution and degradation, Climate Change, Environmental impact assessment
7. Basics of Project Management
8. Basics of Material Science and Engineering
9. Information and Communication Technologies (ICT) based tools and their applications in Engineering such as networking, e-governance and technology based education.
10. Ethics and values in Engineering profession.

Note: The paper in General Studies and Engineering Aptitude will include Knowledge of relevant topics as may be expected from an engineering graduate, without special study. Questions from all the 10 topics mentioned above shall be set. Marks for each Topic may range from 5% to 15% of the total marks in the paper.

Civil Engineering

Contents for syllabi of both the Papers together for Preliminary Examination/Stage-I (objective type Paper-II) and separately for Main/Stage-II Examination (Conventional type Paper-I and Paper – II).

PAPER – I

1. Building Materials:

Stone, Lime, Glass, Plastics, Steel, FRP, Ceramics, Aluminum, Fly Ash, Basic Admixtures, Timber, Bricks and Aggregates: Classification, properties and selection criteria;
Cement: Types, Composition, Properties, Uses, Specifications and various Tests; Lime & Cement Mortars and Concrete: Properties and various Tests; Design of Concrete Mixes: Proportioning of aggregates and methods of mix design.

2. Solid Mechanics:

Elastic constants, Stress, plane stress, Strains, plane strain, Mohr's circle of stress and strain, Elastic theories of failure, Principal Stresses, Bending, Shear and Torsion.

3. Structural Analysis:

Basics of strength of materials, Types of stresses and strains, Bending moments and shear force, concept of bending and shear stresses; Analysis of determinate and indeterminate structures; Trusses, beams, plane frames; Rolling loads,