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ESE - 2027

UPSC Preliminary Examination

GENERAL STUDIES & ENGINEERING APTITUDE

Previous Years Objective Questions with Solutions (Subjectwise)

2017-2026

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Foreword



Engineering Services is one of the most prestigious examinations conducted in the Country for recruitment of engineers in various Central Government Organizations. The depth and breadth of subject knowledge needed to perform in ESE is definitely cut above compared to other similar examinations conducted by any agency that recruits engineers. Nature of work of engineers entering services through ESE involves timely application of both technical and managerial skills. Questions in ESE test the candidate not only in fundamentals but also the ability for application of concepts in a wider aspect.

Therefore the candidate who intends to crack ESE shall have to be double edged in terms of being strong in fundamental concepts and a certain definite levels of application of the concepts as well. This demand makes success in ESE more challenging.

In the latest pattern of examination of ESE, the scope of preparation has extended to Engineering Aptitude in addition to the engineering learned in the College. This round has become crucial for moving to the next round since ranking in ESE includes performance in all the rounds now. An aspiring candidate is now demanded to prepare not just in engineering aspects of the subject. In addition, one has to prepare well in the approach to solving the problems, which is termed the Engineering Aptitude, for a maximum of 200 marks. This approach to engineering tests the candidates in a range of subjects that includes essential mathematical approach, desirable characteristic traits as engineers through Professional ethics, skills at using Information Communication Technologies, Design for safety, Environmental concerns, among others.

Since the UPSC has changed the pattern of examinations effective from 2017, aspiring candidates have been investing more time and effort to find a single point source for strategic preparation in Engineering Aptitude paper which can decide who makes it to further rounds of tests in ESE. This paper can work as filter to make it to the next round apart from contributing to one's overall rank and merit. However, candidates were handicapped by non-availability of such a source of material for effective preparation in this part of ESE. ACE Engineering Academy, the leader and pioneer in contributing to the success of students, very well understands its responsibility and commitment to the aspirants and has come out with this book in the form of a centralized source and repository for focused and improved approach to the preparation for ESE. Candidates would find it highly useful in giving them proper direction in preparing for ESE in a more effective manner and saves a lot of search time for resources. Questions that appeared 2017 to 2025 recruitment examinations in ESE are collected subject-wise, compiled and solved with detailed explanation for the benefit of the reader. Five Model papers are also included for better Practice.

The publishers are of the firm conviction that this book serves the primary purpose it is intended for. The book is made to be as general as possible so that it helps preparation for many other similar national and state level competitive examinations. At the same time, measures are taken not to miss out the purpose for which this book is printed. This book is an outcome of wide and deep knowledge of the professors and the hard work of many support personnel of ACE family.

With best wishes to all those who wish to go through the following pages.

Y.V. Gopala Krishna Murthy,
M Tech. MIE,
Chairman & Managing Director,
ACE Engineering Academy,
ACE Engineering Publications,
Frost Interactive Service Pvt. Ltd. (ACE ONLINE).

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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

General Studies and Engineering Aptitude
Weightage of Subjects in Engineering Services Examination
(2019 – 2026)

S. No.	Name of the Subject	2019	2020	2021	2022	2023	2024	2025	2026
1	Current Issues & Background Concepts of Social Economic and industrial development	11	13	17	18	15	15	14	10
2	Engineering Aptitude	10	10	15	15	15	15	15	15
3	Engineering Mathematics and Numerical Analysis	05	10	15	14	15	15	5	15
4	General Principles of Design, Drawing, Importance of Safety	07	11	7	9	10	07	10	10
5	Standards and Quality practices in production, construction, maintenance and services	07	11	7	7	4	05	9	3
6	Basics of Energy and Environment	12	08	7	8	9	05	11	8
7	Basics of Project Management	11	09	4	6	6	08	7	5
8	Basics of Material Science and Engineering	15	12	7	6	6	07	10	6
9	Information and Communication Technologies (ICT)	10	10	11	9	10	15	11	16
10	Ethics and values in Engineering profession	12	06	10	8	10	08	8	12
	Total No. of Questions	100	100	100	100	100	100	100	100

General Studies and Engineering Aptitude

Previous years Questions with Solutions (2017 – 2026)

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