

SSC-JE

CIVIL ENGINEERING

Practice Book

Practice subject wise questions.

- More than 100 questions per subject.
- Online support, doubt session and discussions with faculty at www.sscjecoaching.in

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SSC-JE

STAFF SELECTION COMMISSION

CIVIL ENGINEERING

STUDY MATERIAL

ENVIRONMENTAL-A

ENVIRONMENTAL-A

ENVIRONMENTAL-A

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SSC JE-Junior Engineer Exam Pattern

The standard of the questions in engineering subjects will be approximately of the level of Diploma in Engineering (Civil/ Electrical/ Mechanical/Electronics).

Staff Selection Commission of India will be conduct this exam in **TWO Stage**.

Paper	Sections	Maximum Marks	Duration
Stage-1 Paper - I	General Awareness	50	2 Hours
	General Intelligence and Reasoning	50	
	Part A- General Engineering (civil & structural)	100	
	Part B- General Engineering (electrical)		
	Part C- General Engineering (mechanical)		
Stage-2 Paper - II	Part A- General Eng. (civil & structural)	300	2 Hours
	Part B- General Eng. (electrical)		
	Part C- General Eng. (mechanical)		
Stage-1			
Total Questions	Type of Questions	Total Marks	Negative Marking
200	MCQ	200	0.25
Stage-2			
Total Questions	Type of Questions	Total Marks	
23-24	Subjective	300	

Minimum qualifying marks in Paper-I and Paper-II are as follows:

UR : 30% OBC/ EWS : 25% Others : 20%

- Based on the normalized marks scored in the (Paper-I) i.e. Computer Based Examination, candidates will be shortlisted, category-wise, to appear in Paper-II.
- Based on the performance in Paper-I+Paper-II, candidates will be shortlisted for Document Verification.

Classroom Coaching

Postal Coaching

Recorded-Videos

Online-LIVE Coaching

Online Test Series

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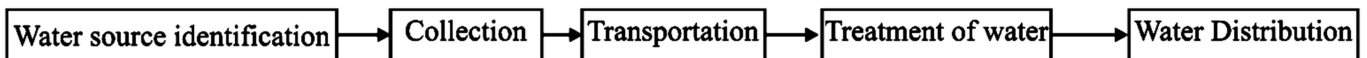
CHAPTER-1

WATER DEMAND

Water Demand:- Estimation of demand for water is the key parameter in planning a water supply scheme.

-The improvement in lifestyle and associated industrial development of a nation as per capita demand for water

Major components of a water supply scheme are:



Classification of water demand for a city

1. Domestic water Demand:

- This includes the water required in private buildings for drinking, cooking bathing, etc. Which may vary according to living conditions of consumers.
- As per IS: 1172-1993, the minimum domestic consumption for a city with full flushing system should be **200l /h/d** (*litre per head per day*) or *lpcd* (*litre per capita per day*) and for economically high section and LIG colonies it can be reduced to 135 *lpcd*.
- The domestic water consumption usually amounts to 50-60% of the total water consumption.

2. Industrial Water Demand:

- It represents the water demand of industries, which are either existing or likely to be established in future.
- This water demand vary with the number and types of industries present in the city.
- In industrial cities, water demand may be 450 *lpcd* and in case of small-scattered industries it may be as low as 50 *lpcd*.

3. Institutional and Commercial water demand:

- Water requirement for institutions like hospitals, hotels, railway stations, school, offices come under this category.
- In general, water demand for it is 20 *lpcd* which may go up to 50 *lpcd* for highly commercialized cities.
- Water demand for certain institutions and commercials:
Offices: 45-90 *lpcd* (l/h/d)
Schools: 45-90 (Day scholars) *lpcd*