

CAREERS 360

PREPARATION **Series**

JEE Main 2025

Memory Based

Questions and Analysis

7th April (Morning Shift)

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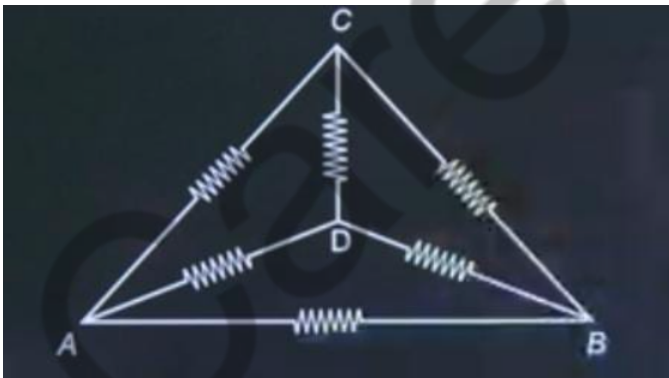
Few Memory-Based Questions

Physics

Q 1. The dimensions of a physical quantity $\epsilon_0 \frac{d\phi_E}{dt}$ are similar to
[Symbols have their usual meanings]

1. Electric Current
2. Electric Field
3. Electric Flux
4. Electric Charge

Q 2. Six resistors of resistance R each, are connected as shown in figure. Find equivalent resistance across points A and B .



1. $R/2$
2. $R/3$
3. $2R/3$
4. $3R/2$

Q 3. 2 plane polarized light waves combine at certain point whose " E " components are

$$E_1 = E_0 \sin \omega t.$$

$$E_2 = E_0 \sin(\omega t + \pi/3)$$

Find the Amplitude of Resultant wave.

1. E_0
2. $0.9E_0$
3. $1.7E_0$
4. $3.4E_0$

Chemistry

Q.1. A compound having molecular formula MX_3 has van't hoff factor of 2. What is the degree of dissociation?

- 1 0.25
- 2 0.5
- 3 0.3
- 4 0.75

Q.2 500 mg of organic compound gives 220 mg of CO_2 . Find mass % of carbon atoms present in organic compound.

Maths

Q 1. The remainder when $64^{64^{64}}$ is divided by 7 is equal to

1. 1

2. 2

3. 3

4. 4

Q 2. Let A be a set defined as $A = \{2, 3, 6, 9\}$. Find the number of singular matrices of order 2×2 such that elements are from the set A .

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Important Details about the Exam

The National Testing Agency (NTA) is conducting the **Joint Entrance Examination (JEE) Main 2025 – Session 2** from **April 2 to April 9, 2025**. The **April 7 Morning Shift exam** was successfully held **today** from **9:00 AM to 12:00 PM** across various exam centres in India and abroad. Here are the other important exam details provided to you.

Particulars	Details
Mode of exam	Online (Computer-based test)
JEE Main exam duration	180 minutes (3 hours)
Types of questions	MCQs and Numerical value questions
Official website of JEE Main	https://jeemain.nta.nic.in/
JEE Main 2025 Marking Scheme	Correct Answer - Four marks (+4) Incorrect Answer- Minus one mark (-1) for MCQs, Zero (0) for Numerical value questions.

Subject-wise distribution of Questions and Marks:-

Subject	Section A (MCQs)	Section B Numerical value questions	Marks
Mathematics	20*	5*	100
Physics	20*	5*	100
Chemistry	20*	5*	100
Total	75		300

*Each subject will consist of a total of 25 questions, divided into two sections. Section A will have 20 Multiple-Choice Questions (MCQs), and Section B will contain 5 compulsory questions whose answers must be filled in as a numerical value. There will be negative markings for Section A (MCQs) but not for Section B (Numerical Value Questions). Answers in Section B should be rounded off to the nearest integer.

This analysis is based on memory-based information provided by students who attended the exam. Real accurate analysis may vary and will be provided when the official question paper is released by the NTA.

Overall Paper Analysis

- The JEE Main 2025 April 7th Morning shift exam was of overall moderate difficulty.
- The JEE Main 2025 April 7th Morning shift paper was moderate compared to the January 2025 session.
- The chemistry section was somewhat tricky and lengthy, while Physics and mathematics were manageable.
- The overall paper level was similar to last year of JEE Main.
- **Subject-wise difficulty (from highest to lowest):**
 - ◆ **Chemistry>physics>math**
- There were more questions from Class 12 than Class 11.

Questions asked from below given important topics

Physics:

- 2-3 questions from Modern Physics
- 1 question from Current Electricity
- 2 questions from Ray Optics
- 1 question from Work, Energy, and Power
- 1 question from Rotational Motion
- 1 question from Elasticity Concept
- 1 question from Semiconductors based on Zener Diode
- 1 question from Newton's Laws of Motion (NLM) chapter based on friction
- 2 questions from Center of Mass (COM) involving a road scenario

Maths:

- 3 questions from the conic section (one question from hyperbola and another from parabola)
- 1 question from the Determinant mixed with circle
- 4 questions from Vector 3D
- 1 question from definite integration
- 2 questions from straight line and circle

Chemistry:

- 1 question from solutions
- 1 question from mole concept
- 1 question from diazotization
- 1 question from biomolecules
- 2 questions from coordination
- 1 question periodic

- 1 question from PH value
- 1 question from chemical equilibrium

Physics Analysis

- The Physics section of the JEE Main 2025 Shift-1 paper on April 7 was easy to moderate in difficulty.
- It was relatively moderate compared to other shifts in April 2025.
- It was easier than Physics in some shifts but harder relative to Chemistry.
- The paper was similar to the Physics sections of the 4th April morning shift and both shifts of 3rd April.
- The 4th April evening shift Physics paper was slightly more moderate than Session 1, 2025.

Questions were asked about the following Topics:

- 2-3 questions from Modern Physics
- 1 question from Current Electricity
- 2 questions from Ray Optics
- 1 question from Work, Energy, and Power
- 1 question from Rotational Motion
- 1 question from Elasticity Concept
- 1 question from Semiconductors based on Zener Diode
- 1 question from Newton's Laws of Motion (NLM) chapter based on friction
- 2 questions from Center of Mass (COM) involving a road scenario

This analysis is based on memory-based information provided by students who attended the exam. Real accurate analysis may vary and will be provided when the official question paper is released by the NTA.

Maths Analysis

- The overall difficulty level of the Mathematics section was easy to moderate.
- The Mathematics section was relatively easier compared to the Chemistry and Physics sections.
- Overall the 7th April Shift 1 Mathematics paper was lengthy as compared to the 2nd, 3rd and 4th April shifts.
- The mathematics section was of a similar difficulty level as compared to the JEE Main 2025 January Session.
- The mathematics section was of a similar difficulty level as JEE Main 2024.
- Overall, the mathematics section was lengthy and calculative.

Questions asked from below given important topics:

- 3 questions from the conic section (one question from hyperbola and another from parabola)
- 1 question from the Determinant mixed with circle
- 4 questions from Vector 3D
- 1 question from definite integration
- 2 questions from straight line and circle
- 1 question from permutation and combination

This analysis is based on memory-based information provided by students who attended the exam. Real accurate analysis may vary and will be provided when the official question paper is released by the NTA.

Chemistry Analysis

- The overall difficulty level of the chemistry section was moderate to hard
- Chemistry is slightly tough compared to the 2025 January shift
- Chemistry was difficult as compared to the 2024 JEE Mains
- The chemistry paper was lengthy.
- The overall weightage of physical is more than inorganic and organic chemistry
- Organic chemistry was mixed with physical chemistry.
- The chemistry section was mostly theoretical.
- 7-8 questions from Physical Chemistry.

Questions were asked about the following Topics:

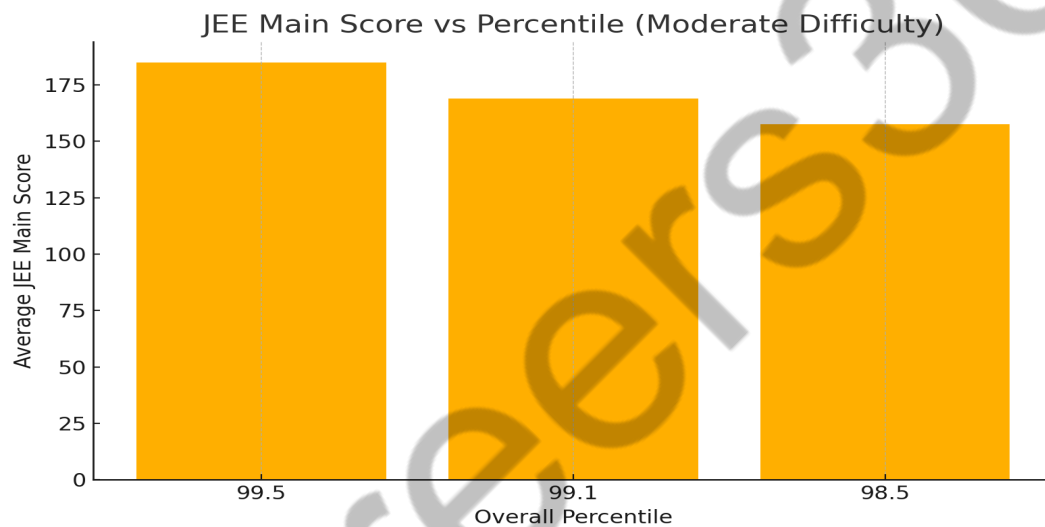
- 1 question from solutions
- 1 question from mole concept
- 1 question from diazotization
- 1 question from biomolecules
- 2 questions from coordination
- 1 question periodic
- 1 question from PH value
- 1 question from chemical equilibrium

This analysis is based on memory-based information provided by students who attended the exam. Real accurate analysis may vary and will be provided when the official question paper is released by the NTA.

Tentative Percentile Vs Score

Since the paper was relatively “**Moderate**”, the higher percentile will be for a little lesser marks than that of the easy difficulty level papers.


Here is the tentative percentile vs score obtained for the exam.



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1:1 counselling Session with Experts Personalized guidance from experienced counselors to help students make informed decisions about their college selection.	College/Course Shortlisting Get a curated list of colleges and specialisation based on exam performance, preferred location and budget.	FREE Rank/College Predictor Use AI-powered tools to predict your potential college options based on entrance exam scores and past trends. Previous year round wise cut offs	Scholarship Opportunities Discover various scholarships, financial aid options, and fee waivers to make higher education more affordable.

These are tentative percentiles from the memory-based information provided by students who attended the exam. Actual percentiles may vary based on the all shifts exam paper and their difficulty level.