



RADHASAI
IIT-NEET
PASSION | PERSEVERANCE | PRUDENCE

GAME CHANGERS IN IIT & NEET COACHING

"Miracles happen when PASSION meets PERSEVERANCE"



Sai Ail - Director

IIT ADVANCED - 2021



KIRAN VISAWÉ

24-AIR



RUDRAKSH SANGORE

424-AIR



CHINMAY SHEVALE

3443-AIR



LOKESH THIRTHANI

4864-AIR



TAKSHIL SHAH

7377-AIR

Kudos to the gargantuan efforts of our entire inhouse IIT'ian & Doctorate faculty team

Put Harvard, MIT and Princeton together,
and you begin to get an idea of the
status of IIT in India.

Rebecca Leung - CBS News

In Our very first batch 2019-21 all five students
have secured ranks which will place them in IIT's

Aide Memoire Analysis Booklet of JEE



RADHASAI
IIT-NEET

PASSION | PERSEVERANCE | PRUDENCE

RADHASAI - IIT
ENGINEERING

RADHASAI - NEET
MEDICAL

RADHASAI - B Arch/B Planning
ARCHITECTURE

RADHASAI - PRODIGY
FOUNDATION

Head Office :
G-1, Chinmaya School,
Shalimar Apartment,
A K Marg, Kemps Corner,
Mumbai : 400 036.

Reg. Office :
Unit No. 1, EdEl, Junction of 11th Road
& Central Avenue Road,
Next to Federal Bank,
Chembur, Mumbai : 400 071.

Branch Office :
Shop No. 201, 2nd floor,
Links Bldg., 14th Road, Pali Hill,
Opp. Domino's Pizza,
Khar, Mumbai : 400 052.

+91 - 99205 47026
www.radhasaiiitneet.com
www.facebook.com/radhasaiiit
https://twitter.com/radhasaiiit



RADHASAI **IIT-NEET**

Indian Institutes of Technology were given a special status by an act of Parliament (Indian Institutes Of Technology Act 1961) towards the end of the British regime in India, the idea of having World Class Engineering Institutes in India emerged. This was further promoted by India's First Prime Minister Jawaharlal Nehru. The first IIT was formed at Kharagpur in 1952, followed by the Institute at Bombay (1958) followed by Delhi, Kanpur, Madras. Today there are in all 23 Institutes strewn across the nation. All of these are unique in the sense that they are all residential schools. IIT's are manned by top class academicians who believed that they can formulate a meritocracy if they are given the powers to decide, WHOM to admit, WHERE to admit and HOW to conduct the syllabi. Each IIT is like an Autonomous University. Today, brand IIT is recognized all across the Globe.

Radhasai - IIT has embarked on an onerous journey of coaching for IIT - (Main / Advanced) with the plenary objective of imparting edification for IIT by IITian's.

Team Radhasai - IIT being IITian's themselves understands the intricate genesis to crack IIT with the mantra "Prudence through Pragmatism".

This booklet is testament of indepth analysis and paramount talent of team Radhasai - IIT, hope it will benefit students to plan and implement their thoughts to action.

Team
"Radhasai - IIT"

JEE Advanced 2021

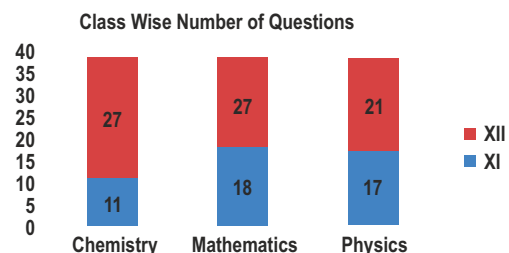
Top 2.50 Lakh students were eligible through rank in JEE Main 2021, out of which 1.51 Lakh students have filled the JEE Advanced Exam form. JEE (Advanced) 2021 were conducted in two parts (Paper 1 & Paper 2) by IIT Kharagpur. Paper 1 was conducted from 9 AM to 12 PM and Paper 2 was conducted from 2:30 PM to 5:30 PM. Only candidates who appear in both Paper 1 and Paper 2 will be considered for ranking. Results were declared on Friday, October 15, 2021 at (jeeadv.ac.in). Category-wise All India Ranks (AIR) of successful candidates is available on the online portal. The seats across IITs, NITs, IIITs and other Govt. Funded Technical Institutes (GFTIs) will be allocated by the Joint Seat Allocation Authority (JoSAA). All the candidates who are eligible for admission will have to participate in the joint seat allocation process by filling in their choices of the courses. The detailed instructions for filling in the choices and the seat allotment procedure will be made available by JoSAA through Seat Allotment Brochure (josaa.nic.in)

OVERALL MARKS DISTRIBUTION

The paper pattern was different in comparison to last Year. Both Paper 1 and Paper 2 had almost similar pattern. Each paper had total of 57 questions. In Paper 1 each subject : Section 1 had 4 questions of Single Correct Choice type worth +3 marks each and -1 as negative marking. Section 2 had 6 questions of Stems (Comprehension) NUMERICAL VALUE type (with two decimal places truncate/round-off) worth +2 marks each and 0 in all other cases. Section 3 had 6 questions of ONE OR MORE THAN ONE type worth +4 marks (with partial marking) each and with -2 negative marking. Section 4 had 3 questions of NON-NEGATIVE INTEGER type worth +4 marks and no negative marking

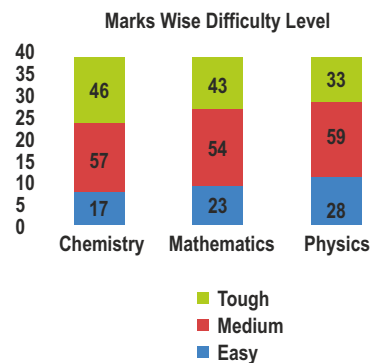
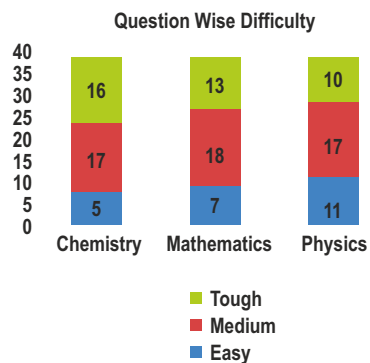
In Paper 2 Section 1 had 6 questions of ONE OR MORE THAN ONE type worth +4 marks (with partial marking) each and with -2 negative marking. Section 2 had 3 questions of Stems (Comprehension) NUMERICAL VALUE type (with two decimal places truncate/round-off) worth +2 marks each and 0 in all other cases. Section 3 had 4 questions of Comprehension based Single Correct Choice type worth +3 marks each and -1 as negative marking. Section 4 had 3 questions of NON-NEGATIVE INTEGER type worth +4 marks and no negative marking. Subject wise each subject had 19 questions of 60 marks in total in both Paper 1 and Paper 2. Both Paper 1 and Paper 2 were of 180 marks each. Total marks for combined Paper 1 and Paper 2 are 360 marks.

Subject	Class 11		Class 12		Total Percentage	
	No of Questions	Total Marks	No of Questions	Total Marks	Class 11	Class 12
Chemistry	11	32	27	88	29%	71%
Mathematics	18	56	20	64	47%	53%
Physics	17	52	21	68	45%	55%
Grand Total	46	140	68	220	40%	60%



SUBJECT-WISE DIFFICULTY LEVEL ANALYSIS: NO OF QUESTIONS In this analysis, we have rated every question on a scale of 1 to 3. The ratings are done by expert faculty of Resonance. The individual ratings are then averaged to calculate overall difficulty level.
● 1: Easy ● 2: Moderate ● 3: Difficult

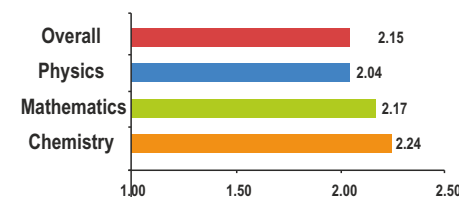
Subject	Easy Level		Medium Level		Difficult Level	
	No of Questions	Total Marks	No of Questions	Total Marks	No of Questions	Total Marks
Chemistry	5	17	17	57	16	46
Mathematics	7	23	18	54	13	43
Physics	11	28	17	59	10	33
Grand Total	23	68	52	170	39	122



Chemistry and Mathematics paper was on tougher side as compared to Physics. Out of 360 marks, 68 marks paper can be considered of easy level, 170 marks can be considered of medium difficulty level and 122 marks can be considered to be of difficult level. Overall, difficulty level of paper seemed to be moderate to difficult.

OVERALL DIFFICULTY LEVEL ANALYSIS In this analysis, we have rated every question on a scale of 1 to 3. The ratings are done by expert faculty of Resonance. The individual ratings are then averaged to calculate overall difficulty level. ● 1: Easy ● 2: Moderate ● 3: Difficult

Subject	Difficulty Level
Chemistry	2.24
Mathematics	2.17
Physics	2.04
Grand Total	2.15



PHYSICS ANALYSIS Topic wise Allocation of Marks

PHYSICS			
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%)
Physics	38	120	100%
Electrodynamics	12	34	28%
Alternating Current	2	4	3%
Capacitance	2	4	3%
current Electricity	1	4	3%
Electro Magnetic Field	2	8	7%
Electro Magnetic Induction	3	10	8%
Electrostatics	2	4	3%
Heat & Thermodynamics	4	13	11%
Heat & Transfer	1	4	3%
KTG & Thermodynamics	3	9	8%
Mechanics	14	43	36%
Centre of Mass	4	8	7%
Error in Measurement	1	3	3%
Fluid Mechanics & Properties of Matter	3	8	7%
Gravitation	1	4	3%
Rigid Body Dynamics	4	16	13%
Unit & Dimension	1	4	3%
Modern Physics	4	15	13%
Modern Physics	2	8	7%
Nuclear Physics	2	7	6%
Optics	3	11	9%
Geometrical Optics & Physical Optics	3	11	9%
SHM & Waves	1	4	3%
Sound Waves	1	4	3%

CHEMISTRY ANALYSIS Topic wise Allocation of Marks

PHYSICS			
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
Chemistry	38	120	100%
Inorganic Chemistry	9	33	28%
Coordination Compounds	3	11	9%
Metallurgy	1	4	3%
Qualitative Analysis	3	10	8%
p-Block 17-18 Group	1	4	3%
p-block (15-16 Grp)	1	4	3%
Organic Chemistry-I	2	8	7%
Hydrocarbon	1	4	3%
Practical Organic Chemistry	1	4	3%
Organic Chemistry-II	10	32	27%
Aromatic Compounds	3	12	10%
Biomolecules	1	4	3%
Hydrocarbon (Alkene & Alkyne)	3	9	8%
Stereoisomerism	1	3	3%
Aldehyde Ketone	2	4	3%
Physical Chemistry-I	9	24	20%
Atomic Structure & Nuclear Chemistry	1	4	3%
Chemical Equilibrium	2	4	3%
Equivalent Concept	4	8	7%
Thermodynamics and Thermochemistry	2	8	7%
Physical Chemistry-II	8	23	19%
Chemical Kinetics	1	4	3%
Electrochemistry	3	8	7%
Solid State	1	3	3%
Surface Chemistry	1	4	3%
Solution & Colligative Properties	2	4	3%

MATHEMATICS ANALYSIS Topic wise Allocation of Marks

PHYSICS			
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
Mathematics	38	120	100%
Complex Numbers	2	7	6%
Complex Number	2	7	6%
Coordinate Geometry	9	25	21%
Circle	3	9	8%
Ellipse	1	4	3%
Parabola	3	8	7%
Straight Line	2	4	3%
Differential Calculus	3	8	7%
Application of Derivatives	3	8	7%
Fundamentals of Mathematics	1	4	3%
Fundamentals of Mathematics	1	4	3%
Integral Calculus	8	25	21%
Area Under Curve	1	3	3%
Define Integration	6	18	15%
Differential equation	1	4	3%
Matrix & Determinants	4	12	10%
Matrix & Determinants	4	12	10%
Permutation & Combination	1	4	3%
Permutation & Combination	1	4	3%
Probability	5	15	13%
Probability	5	15	13%
Trigonometry	3	12	10%
Inverse Trigonometric function	1	4	3%
Solution of Triangle	1	4	3%
Trigonometric Ratio & Identities	1	4	3%
Vector and 3D	2	8	7%
Vector	2	8	7%

JEE Main Cut-off Score: 2019 - 2020 - 2021 Compared

Category	JEE Cut-off 2019	JEE Cut-off 2020	JEE Cut-off 2021
Common Rank List (CRL)/ General Category	89.7548849	90.3765335	87.8992241
Economically Weaker Sections (EWS)	78.2174869	70.2435518	66.2214845
Other Backward Class (OBC-NCL)	74.3166557	72.8887969	68.0234447
Scheduled Castes (SC)	54.0128155	50.1760245	46.8825338
Scheduled Tribes (ST)	44.3345172	39.0696101	34.6728999
People with Disability (PwD)	0.1137173	0.0618524	0.0096375

3

JEE Main 2021 Paper Analysis for February session

JEE Main 2021 26th February Evening Slot Physics Paper Analysis:

Some of the topics covered in the JEE Main 2021 26th February shift 2 Physics is listed below. The questions from the below-listed topic were easy to moderate.

Concept

Resistance and resistivity
Equations of motion of SHM
Energy level for Hydrogen
Beats
Application of Dimensional analysis (I) -To find dimension of physical constant

Chapter

Current electricity
Oscillation and Waves
Atoms and Nuclei
Oscillation and Waves
Physics and Measurement

JEE Main 2021 26th February Evening Slot Chemistry Paper Analysis:

The chemistry part of JEE Main 2021 26th February shift 2 covered questions from organic, inorganic and physical chemistry. The weightage of organic chemistry was a bit more and the questions from physical chemistry is moderate and that from inorganic chemistry is easy. The questions from organic chemistry included easy, moderate and difficult questions.

Chemistry Topics

Concept	Chapter
Test for Aldehydes	Organic Compounds containing Oxygen
nature of Oxides	p- Block Elements
Electron Gain enthalpy	Classification of Elements and Periodic table
Hybridisation	Hydrocarbons
Isotopes	Hydrogen
Bond energy	Chemical Thermodynamics
Arrhenius Equation	Chemical kinetics
Isomerism	Coordination Compounds
Polyprotic Acid	Equilibrium
Heisenberg's uncertainty Principle	Atomic Structure
Test of Proteins	Principles Related to Practical Chemistry

February Evening Slot Mathematics Paper Analysis:

Most of the questions from Maths part of Feb 26th JEE Main 2021 was moderate. The questions asked from sets relation and function were moderately difficult

Concept	Chapter
Roots of Quadratic equations	Complex numbers and quadratic equations
Relation between Roots and Coefficients	Sets, Relations and Functions, Complex numbers and quadratic equations
Definite Integration	Integral Calculus
Matrix Multiplication	Matrices and Determinants
Tangent of Circle and ellipse	Coordinate geometry
Definite Integration	Integral Calculus

Application of derivative, Area of triangle	Coordinate Geometry, Limit, continuity and differentiability
Definite Integration	Integral Calculus
Circle	Coordinate geometry
Distance between two point	Coordinate geometry
Mirror Image of a point	Three Dimensional Geometry
Countinuity and differentiability	Limit , continuity and differentiability
Composite function	Sets, Relations and Functions
Intersection of plane	Three Dimensional Geometry

The paper for the evening shift of Feb 26, 2021, was on predicted lines. It was of easy to moderate levels with some good questions interspersed here and there. Most of the questions were either directly taken from NCERT or were closely based on NCERT concepts.

Chemistry:- A couple of questions involved lengthy calculations, but these questions could have been avoided by exercising an internal choice.

The paper was easy to moderate; almost all the topics were covered. The chapters of classes XI and XII were given almost equal weightage and, by and large, based on NCERT content. There were sufficient questions on Organic Chemistry, followed by Physical and Inorganic questions.

Physics - Questions were asked from Mechanics, Electrostatics, Magnetism, Current Electricity, Heat and Thermodynamics and optics. Some of the questions involved lengthy calculations, but overall, it was an easy to moderate level of paper.

Mathematics - Like other sections, Mathematics section also contained two sections. It contained questions on Algebra, Calculus, coordinate Geometry, Vector and Three Dimensional Geometry. As usual, a few questions involved lengthy calculations.

JEE Main 2021 Analysis February 26 Shift 1

The paper was easy to moderate including some easy questions. Most of the questions were either directly taken from the NCERT textbooks or were closely based on NCERT concepts. Physics paper was the easiest followed by Chemistry and Mathematics.

Chemistry: The paper was easy to moderate. Almost all the topics were covered. The chapters of classes XI and XII were given almost equal weightage and by and large based on NCERT content. Organic Chemistry was sufficiently asked, followed by Physical and Inorganic branches.

Physics: The Physics paper was also easy to moderate. Adequate weightage was given to mechanics, electricity and Magnetism, and Modern Physics.

Mathematics: It was also of easy to moderate levels with all the topics covered. Questions on Calculus, Algebra, Coordinate Geometry, Vectors, and 3-dimensional Geometry got due representation.

JEE Main 2021 Analysis - February 25 Shift 2

Paper was on easy side. In physics, most questions were from Kinematics, and in chemistry many questions were from organic part. The overall difficulty level of paper was moderate.

Most students found maths section to be toughest and chemistry was easiest among the three subjects. Graph based questions were mostly asked in maths.

Overall, the paper was moderate; It was balanced and almost all topics were covered in every subject and the students were able to complete in the given timeline. If we compare difficulty level, then it would be Chemistry>Maths>Physics.

Maths

30 Question (20 MCQ +10 Numerical value-based)

- The paper was moderate.
- There were more than 10 questions from coordinate geometry
- Questions from calculus were in good numbers.
- Integer type of questions was not calculative. As the students had an option of selecting any 5, they opted for the less calculative question. (This section had question majorly from coordinate)

Chemistry

30 Question (20 MCQ +10 Numerical value-based)

- The chemistry was above moderate
- More questions were from organic chemistry. (8-9 question)
- 6-7 questions from inorganic were easy to solve.
- Integer type question contained questions from physical chemistry along with calculative.

Physics

30 Question (20 MCQ +10 Numerical value-based)

- The difficulty level of physics was easy
- Majority of questions were from the class 12 syllabus.
- Integer type question was not calculative.
- The level of the questions was easy.

JEE Main Exam Analysis 2021 - February 25 Shift 1

The Paper was balanced and almost all topics were covered in every subject. The students were able to complete in the given timeline and if we compare the difficulty level, then it should be MATHS >CHEMISTRY>PHYSICS.

Mathematics

- Overall, the papers was calculative and lengthy compare to Chemistry and Physics.
- Questions were a bit tricky and also calculative.
- Questions from calculus, coordinates were on a higher note
- The difficulty level of Maths was also Moderate, and the question asked mostly from calculus, algebra and coordinate geometry.
- The paper was conceptual and a bit lengthy.

Chemistry

- Chemistry was moderate
- More number of questions asked from organic chemistry.
- Less number of physical chemistry questions and also calculative.
- Integer type questions were easy.

Physics

- The difficulty level of physics was easy (approx 15 questions were basic)
- Integer type questions were not calculative.
- Well balanced question from class 11 and 12.

Questions covered almost all chapters of Class 11 and 12 CBSE board. Balanced paper as per students in terms of coverage of chapters. It was tougher as compared to papers held on 24th Feb,2021. In terms of difficulty – **Mathematics was Moderate level while Chemistry was easiest amongst the three subjects. Overall, this paper was of Moderate level as per students.**

Mathematics:- Moderate level. Questions were asked from chapters majorly from co-ordinate geometry & algebra. Few numerical based questions required lengthy calculations. Weightage was given to chapter like vectors, matrices, complex numbers in algebra.

Physics:- Easy to moderate level. Questions asked from gravitation, current electricity & AC circuits. Few numerical based questions had lengthy calculations but were easy. Theory based questions from class 12 chapters of NCERT were asked.

Chemistry:- Easy level. Questions covered chapters like chemical kinetics, electrochemistry in physical chemistry, organic chemistry was given more weightage. Inorganic chemistry had mostly questions from NCERT.

JEE Main Analysis 2021 - February 24 Shift 2

mathematics was tough in comparison to physics and chemistry. In physics, questions from thermodynamics were tricky and difficult. Most of the questions were NCERT based.

Questions in Chemistry section of JEE Main 2021 were mostly memory based. Some students also said that a few questions were similar to the questions asked in previous year papers. Overall the paper was easy to moderate in difficulty level.

Overall, the JEE Main Paper was Easy and balanced. Almost all topics were covered in every subject. Students were able to complete in a given timeline if we compare difficulty level, then Maths >Physics >Chemistry.

Physics

- 30 Question (20 MCQ +10 Numerical value-based)
- Overall, the Paper was moderate as compared to Chemistry & Maths.
- Physics paper covered almost all Topics. The question came from Electrostatics, Mechanics, Optics & Modern Physics
- Integer type of questions was easy

Chemistry

- 30 Question (20 MCQ +10 Numerical value-based)
- Chemistry paper was moderate
- The Paper was very well balanced as it had an equal number of physical, organic, and inorganic chemistry questions.
- All topics were covered, though the integer-type questions of physical chemistry were calculative.

Mathematics

- 30 Question (20 MCQ +10 Numerical value-based)
- Maths' difficulty level also moderate, and questions asked were mostly from Calculus, Algebra & Coordinate geometry.
- The paper was quite balanced, and students were able to complete it under the given Timeline.

NOTE: The important thing that all questions were aligned with the NCERT syllabus.

JEE Main Analysis 2021 - February 24 Shift 1

- Paper was moderate in difficulty level and were like previous year papers of JEE Main
- In Chemistry questions were asked from polymer, everyday life, bio molecules and mixed concepts, substitution reaction
- Questions in all three subjects were within the syllabus
- Choices within the questions were very helpful
- In Physics many questions were from atoms and nuclei, in Chemistry, organic part was more.
- Questions from integration and complex numbers were difficult
- Most questions were from class 11 part of JEE Main syllabus.

In terms of the order of Difficulty – Maths & chemistry were of the moderate level while physics was easiest amongst the three subjects. This paper was easy to moderate level as per students

Mathematics–Easy to Moderate level:- Questions were asked from chapters majorly from calculus, coordinate geometry, algebra, vector & 3D geometry. Few numerical-based questions required lengthy calculations. Weightage was given to calculus. Paper Was not lengthy questions from coordinate geometry, calculus, matrices & determinant vectors & 3D

Physics – Easy level:- Questions asked from kinematics, optics, electrostatics, magnetism, current electricity, EM waves, heat and thermodynamics. Few numerical based questions had lengthy calculations but were easy. Theory based questions from class XII chapters of NCERT were asked. 3 questions from semiconductors, 1 question from units & measurement, 12th class syllabus more dominated over class 11th no question from rotation. Questions from modern physics, current electricity & thermodynamics.

Chemistry - Moderate level:- Questions covered chapters like chemical bonding, co-ordination compounds, heat & thermodynamics had more weightage. Inorganic chemistry had mostly questions from NCERT. There were 2-3 questions which were little odd mat be from lab manual. Rest questions were from periodic table, chemical bonding, equilibrium, solutions & organic concepts.

JEE Main 2021 Analysis for March Session

JEE Main Shift 2 Analysis 2021: March 18 (Evening Shift)

Mathematics was moderate level, Physics was moderate to tough and Chemistry was easy. Overall, this JEE Main March 18 shift 2 paper was of Moderate level.

Chemistry: This section was easy and questions were mostly asked directly from the NCERT syllabus.

Mathematics: Questions came from topics like 3D, Vector, Integration, Differentiation, Parabolic, etc. The difficulty level of Maths was moderate to tough and lengthy.

Physics: The difficulty level of this subject was moderate. Questions were asked from topics like Electrostatics, Capacitance, EMI, AC, etc.,

JEE Main Shift 1 Analysis 2021: March 18 (Morning Shift)

Exam was moderate in difficulty level. Questions were asked based on the NCERT class 12 syllabus. Also, get subject-wise difficulty level and questions asked details as under:

- The difficulty level of Mathematics was moderate and lengthy. Questions came from the Parabolic, Matrix, Straight line, Circle, differential, etc.
- The Physics section was moderate in difficulty. Questions were asked from Time Period, Force, Mechanics, Electricity, Frictions etc. Mostly all the topics are covered. The Chemistry subject was easy as usual. Questions were asked in this section are mostly based on the 12th class NCERT. Questions came from Physical chemistry mostly and some questions came from topics include Polymers, Biomolecules, Faraday's Law etc.

JEE Main 2021 Analysis Shift 1: March 18

Physics	Type of Questions		
	MCQs	Numerical Response	Total
Ray Optics & Wave Optics	2	0	2
Mechanics	5	4	9
Electromagnetism	7	2	9
Fluid Mechanics	0	1	1
Modern Physics	3	1	4
Heat & Thermodynamics	1	1	2
Waves & SHM	2	1	3

Chemistry	Type of Questions		
	MCQs	Numerical Response	Total
Physical Chemistry	3	5	8
Inorganic Chemistry	7	4	11
Organic Chemistry	9	1	10

Mathematics	Type of Questions		
	MCQs	Numerical Response	Total
Algebra	7	5	12
Calculus	7	2	9
Trigonometry	1	1	2
Coordinate	4	0	4
Vector & 3D	1	2	3

· JEE Main 2021 March 18 question paper covered almost all chapters of Class 11 and 12. The JEE Main question paper March 18 was balanced. It was tougher as compared to papers held in February.

· Mathematics was moderate to tough level. Questions were majorly asked from Calculus & Algebra. Weightage was given to chapter like vectors, matrices, probability, 3 D Geometry, complex numbers in algebra. No questions were there on mathematical reasoning.

· Physics section was easy. Questions asked from Modern Physics, Electrostatics, Magnetism, Current Electricity, AC Circuits, Semi-conductors & Communication devices. Few numerical based questions had lengthy calculations but were easy. Error Analysis had 2 questions.

· Chemistry was moderate level as per JEE Main March analysis. Organic & Physical Chemistry were given more weightage as compared to Inorganic Chemistry. Numerical based questions were tricky.

In terms of order of JEE Mains difficulty, Mathematics was moderate to tough level while Physics was easiest amongst the three subjects. Overall, this paper was of Moderate level as per students.

JEE Main 2021 Analysis Shift 2: March 17 (Afternoon)

The overall difficulty level of the JEE Main 2021 March 17 shift 2 exam was moderate.

Mathematics - The subject was moderate to hard in difficulty level. Questions were asked from the integral, differential, conic section, straight line etc.

Physics - The difficulty level of Physics was easy to moderate. Questions were asked from logic gates, NLM, work, power, energy, rotational, thermodynamics, gravitation, distance etc.

Chemistry - The section was easy in difficulty level. Questions were asked based on the NCERT syllabus. Some of the topics are polymers, reaction balance (integer), functional group, halogen etc.

JEE Main March 17 analysis for shift 2

Physics	Type of Questions		
	MCQs	Numerical Response	Total
Ray Optics & Wave Optics	0	2	2
Mechanics	5	3	8
Electromagnetism	6	1	7
Fluid Mechanics	1	1	2
Modern Physics	3	2	5
Heat & Thermodynamics	2	0	2
Waves & SHM	3	1	4

Chemistry	Type of Questions		
	MCQs	Numerical Response	Total
Physical Chemistry	3	4	7
Inorganic Chemistry	10	2	12
Organic Chemistry	7	4	11

Mathematics	Type of Questions		
	MCQs	Numerical Response	Total
Algebra	7	3	10
Calculus	7	3	10
Trigonometry	1	1	2
Coordinate	4	1	5
Vector & 3D	1	2	3

JEE Main 2021 Analysis Shift 1: March 17 (Forenoon)

The overall difficulty level of the exam was moderate.

Physics: The section was average in difficulty. Questions were asked from logic gates, energy in inducting capacitor, resonance, RC circuit, potentiometer, etc.,

Chemistry: The difficulty level of this section was easy. Questions were asked from topics including metallurgy, Borax, H₂O₂, Polymers, Van't Hoff factor, Biomolecules, etc.,

Mathematics: The section was moderately difficult. Questions were asked from the AGP series, reasoning, common tangents, invertible functions, eccentricity etc.

JEE Main 2021 March 17 Shift 1 Analysis

· JEEMain March 17 questions in shift 1 covered almost all chapters of Class 11 and 12. The paper was balanced in terms of coverage of chapters. JEE Main today's paper was slightly tougher as compared to papers held in February but easier compared to exam held on March 16,2021.

· Mathematics was moderate to tough in terms of JEE Main difficulty. There were multiple questions from chapters like Differential Equations, Conic Sections, Vectors & 3D Geometry. Few numerical based questions were tricky and required lengthy calculations.

· Physics was easy to moderate in difficulty. Questions asked from all chapters with easy questions from chapters like Semi-Conductors, Current Electricity, Communication Devices & AC Circuits. Few numerical based questions had lengthy calculations but were easy. Theory-based questions from class 12 chapters of NCERT were also asked.

· Chemistry was easy with a balanced section and equal weightage to chapters of Physical, Inorganic & Organic Chemistry. Covered almost all chapters of NCERT. In terms of order of Difficulty, mathematics was moderately tough while Chemistry was easiest amongst the three subjects. Overall, this paper was of moderate level as per students.

JEE Main March 16 Shift 2 Analysis

Physics:- In a paper of 30 questions, there were two sections, Section I contained 20 single option correct MCQ, whereas Section II contained 10 numerical based questions, out of which only 5 were to be answered. Questions were asked from Mechanics, Electrostatics, Magnetism, Current Electricity, Heat and Thermodynamics and optics. Some of the questions involved lengthy calculations, but overall, it was an easy to moderate level paper. Overall Paper was a lengthy 7-8 question from Modern physics and 5 questions from Radioactivity.

Chemistry:- Section I comprised 20 multiple choice questions, whereas section II contained 10 numerical based questions with an internal choice of any 5 questions to be attempted. Some students reported that a couple of questions involved lengthy calculations, but these questions could be avoided by exercising the internal choice. The paper was easy to moderate; almost all the topics were covered. The chapters of classes XI and XII were given almost equal weightage and, by and large, based on NCERT content. Organic Chemistry was sufficiently asked, followed by Physical and Inorganic branches.

Mathematics:- As in the other subjects, this part also contained two sections, Sections I contained 20 MCQ with single option correct type. It contained questions on Algebra, Calculus, coordinate Geometry, Vector and Three Dimensional Geometry. Section II was comprised of 10 numerical based questions with only 5 of them to be answered. As usual, a few questions involved lengthy calculations. Some students reported that a few questions were somewhat tricky.

JEE Main Analysis 2021 Shift 1 of March 16

Chemistry (Easy and NCERT Based) :- Section I comprised 20 multiple choice questions, whereas section II contained 10 numerical based questions with an internal choice of any 5 questions to be attempted. Some students reported that a couple of questions involved lengthy calculations, but these questions could be avoided by exercising internal choice. The paper was easy to moderate; almost all the topics were covered. The chapters of classes XI and XII were given almost equal weightage and, by and large, based on NCERT content. Organic Chemistry was sufficiently asked, followed by Physical and Inorganic branches. This time AR Type of questions were around 5-6 in chemistry that is a little different from usual.

Physics (Easy to Moderate):- In a paper of 30 questions, there were two sections, Section I contained 20 single option correct type MCQs, whereas Section II contained 10 numerical based questions, out of which only 5 were to be answered. Questions were asked from Mechanics, Electrostatics, Magnetism, Current Electricity, Heat and Thermodynamics and optics. Some of the questions involved lengthy calculations, but overall, it was an easy to moderate level paper.

Mathematics (Moderate to Difficult):- As in the other subjects, this part also contained two sections, Sections I contained 20 MCQ with single option correct type. It contained questions on Algebra, Calculus, coordinate Geometry, Vector and Three Dimensional Geometry. Section II comprised of 10 numerical based questions with only 5 of them to be answered. As usual, a few questions involved lengthy calculations. Some students reported that a few questions were somewhat tricky.

JEE Main 2021 Analysis-July 2021

Day 1 Shift I (20th July 2021):

The paper of this session was difficult as expected by the students. The Physics and Mathematics section were toughest as comparison to the Chemistry section. In Physics, most of the questions asked were from rotational motion and electromagnetism. There were around 15 questions which were NCERT based. The numerical in Mathematics were very hard. The questions asked were from the topics – Algebra, Coordinate geometry, calculus, etc. The weightage of questions asked in Mathematics section was 45% from 11th level syllabus and 55% from 12th level syllabus.

Day 1 Shift II (20th July 2021):

The paper of this session was moderate in difficulty level. The chemistry was easy as comparison to Mathematics and Physics section. In Chemistry section, the questions were mostly from NCERT syllabus. The questions were from topics – Chemical bonding, Environment chemistry, Liquid solutions, Electrochemistry, Halogens, Hydrogen Bonding, etc.

The Mathematics section was tough in difficulty level as the questions were lengthy. The questions were from the topics – Definite Integration, 3D Geometry, Permutation, Parabola, Complex numbers, Binomial Theorem, etc.

The Physics section was moderate in difficulty level. The questions were from the topics – Sound, Thermodynamics, vector, current electricity, work power energy, modern physics, etc.

Day 2 Shift I (22nd July 2021):

The paper of this session was overall moderate in difficulty level. As per the students, the Chemistry & Mathematics section was moderate to difficult in nature. Whereas, the Physics section was easier one. The question in physics section were mostly from 11th class syllabus.

Day 2 Shift II (22nd July 2021):

The shift 2 paper of 22nd July 2021 was moderate to difficult in nature. In Mathematics section, the questions were calculative and tough in nature as compare to the previous session.

For Physics section, the paper was moderate in difficulty level. This section was also calculative in nature.

In chemistry section, there were mostly questions from NCERT. There were questions from topics – polymers, environment chemistry, etc. Also, there were equal number of questions from organic as well as inorganic chemistry.

Day 3 Shift I (25th July 2021):

The paper of this shift was moderate in difficulty level. Almost every topic was covered in the paper of every subject. In Physics section, the paper was moderate in difficulty level.

Mathematics section was considered to be more difficult than other subjects. Paper of mathematics was calculative and lengthy in nature.

In Chemistry section there were equal weightage for inorganic and organic chemistry. There were questions mostly from NCERT in chemistry.

Day 3 Shift II (25th July 2021):

The paper of this session was moderate in difficulty level. Mathematics & Physics section were moderate in difficulty level. While, the chemistry section was easy to moderate in difficulty level. Questions in chemistry section were mostly from NCERT. In physics section, there were questions from topics – Semiconductors, kinematics, etc. The questions in Mathematics section were considered quite easy by the students.

Day 4 Shift I (27th July 2021):

The paper of this shift was considered to be moderate in difficulty level.

In Physics section, the questions were mostly formula based.

In the Mathematics section, the questions were considered to be difficult and lengthy.

In the Chemistry section, there were questions from NCERT. The questions were from topics like chemistry in every day life, polymer biomolecule, etc. This section was considered to be easiest one.

Day 4 Shift II (27th July 2021):

The paper was overall moderate in difficulty level.

In Mathematics section, the questions asked were lengthy and tough. Questions asked in the paper were from relation, statistics, reasoning, trigonometry, coordinate geometry, etc. Overall this section was moderate to tough.

In Chemistry section, the questions were NCERT based. Questions were asked from the topics – Polymers, metallurgy, biomolecules, coordination compounds, etc. Overall this section was easy to moderate in difficulty level.

In Physics section, the questions were asked from almost all topics in well balanced manner. Questions were from the topics like semiconductors, EMF, Fluids, Electrostatics, alternating currents, etc. Overall this section was moderate in difficulty level.

JEE Main 2021 Exam Analysis –August 2021**Day 1 Shift I (26th August 2021):**

In Mathematics section, there were questions from integration, statistics, probability, etc. The paper was easy on comparison to previous attempt.

In Chemistry section, mostly the questions were from NCERT. More weightage was given to the questions of theory portion. The questions in this section were easy. The organic, inorganic & physical chemistry sections were given equal weightage.

In Physics section, the questions were easy to moderate in difficulty level. The questions were from the topics – EM waves, modern physics, gravitation and many more. As comparison to previous session, the questions were less time consuming.

Day 1 Shift II (26th August 2021):

The overall difficulty level of the exam was moderate.

In Physics section, there were questions from the topics – Semiconductors, Gravitation, etc. This section was moderate to difficult.

In Chemistry section, most of the questions were from NCERT and were easy. The topics asked in the exam were from topics – Chemistry in everyday life, polymers, biomolecules, etc. Overall this section was easiest.

Mathematics section was moderate to difficult in nature. Also, it was lengthy and typical.

Day 2 Shift I (27th August 2021):

The paper was overall moderate in difficulty level.

In Physics section, there were questions from the topics – modern physics, electrostatic, magnetism, etc. Weightage was given to questions of 12th class more. This section was overall moderate in difficulty level.

In Mathematics section, there were questions from statistics, coordinate geometry, probability, etc. This section was lengthy and moderately difficult.

In Chemistry section, questions were from chemistry in every day life, polymers, s-block and other topics. This section was easiest in difficulty level. More weightage was given to the questions from organic chemistry.

Day 2 Shift II (27th August 2021):

The paper was overall moderate in difficulty level.

In Physics section, there were questions from the topics – magnetism, modern physics, electromagnetic induction, electricity, etc. Overall this section was moderate in difficulty.

In Mathematics section, the questions were from topics – statistics, 3D geometry, coordinate geometry, probability, etc. This section was considered to be moderate to difficult. Mathematics was tough like in the previous session.

In Chemistry section, most of the questions were NCERT based. Of all the sections, chemistry was the easiest one. There was more weightage of questions from 12th level syllabus.

Day 3 Shift I (31st August 2021):

The paper was overall moderate in difficulty level.

In Mathematics section, there were questions from topics – Binomial equations, differentiation, parabola, algebra, calculus, integration, etc. This section was moderate in difficulty level.

In Physics section, there were questions from almost all the topics. The topics were modern physics, magnetism, logic gates, voltage leakage, electrostatics, semi conductors, etc. It was easy to moderate in difficulty level.

In Chemistry section, there were mostly questions from organic chemistry. This section was easiest and questions were NCERT level.

Day 3 Shift II (31st August 2021):

The paper of this shift was considered to be moderate in difficulty level.

In Chemistry section, questions were asked from chemical kinetics, polymers, ionic equilibrium, p-block elements, magnetism, optics, etc. Mostly there were questions from organic chemistry. Overall this section was easy.

In Mathematics section, the topics were from circle, parabola, differential calculus, coordinate, etc. This section was moderate in difficulty level but was lengthy and time consuming.

In Physics section, there were questions from topics – AC, diode, electrostatic, thermodynamics, semiconductors, etc. This section was moderate in difficulty level.



RADHASAI
IIT - NEET

Analysis JEE Main - Advanced 2020

JEE Main Result 2020: This year, the JEE cut-off percentile for general category candidates in the "common rank list" (CRL) is 90.3765335, up from 89.7548849 in 2019. However, the cut-off NTA scores for JEE Main 2020 have dropped for all other categories -- Economically Weaker Sections (EWS), Scheduled Castes (SC), Scheduled Tribes (ST) and Persons with Disability (PwD). The National Testing Agency (NTA) has released the NTA scores and cut-offs for the Joint Entrance Examination (JEE) Main conducted in two sessions, from January 6 to 9, and again, from September 1 to 6. Over 9 lakh wrote the JEE Main 2020 in January and 6.35 lakh wrote JEE Main 2020 in September. One group of candidates was common to both exams. However, after the second round, the NTA compiles results of both sessions and releases combined JEE cut-off and ranks.

The JEE Main cut-off score basically indicates the score of the last person to write the JEE Main who has qualified to write the JEE Advanced for admission to the premier Indian Institutes of Technology or IIT. The top 2,50,000 (2.5 lakh) scorers in the JEE Main are eligible to write the JEE Advanced. A drop or increase in the cut-off percentile scores, therefore, implies a general decline or improvement in performance.

Detailed JEE Advanced Analysis 2020

JEE Advanced Analysis 2020: IIT Delhi conducted the JEE Advanced 2020 exam on **27th September 2020**. The JEE Advanced analysis 2020 will give detailed information about the **difficulty level of each section** as well as the **overall difficulty level of the exam**, the **distribution of questions**, **type of questions asked in the paper**, etc.

The JEE Advanced analysis provided here is based on the memory-based questions shared by students who appeared for the exam and it's a testimonial of general perception of students. RADHASAI do not in any form categorises the pattern or its standard in general.

JEE Advanced Subject-Wise Analysis 2020 Paper 2

JEE Advanced Paper 2 was overall difficult in nature and calculative due to pattern change. Out of total registered candidates, 96% have appeared for the exam.

- JEE Advanced Paper 1: 1,51,311
- JEE Advanced Paper 2: 1,50,900

JEE Advanced 2020 Paper 2 – Pattern:

- 1.Total Questions in the exam: 54 (18 in each section)
- 2.Integer type of questions: 6 (with negative marking)
- 3.Multi-correct answer: 6 (with negative marking)
- 4.Numericals: 6 (answer up to decimal without negative marking)

JEE Advanced Analysis 2020 Paper 2 – Physics

- 1.Physics was calculative and lengthy.
- 2.Most of the syllabus was covered.
- 3.Marks were distributed equally in Class 11 and Class 12 syllabi, with

Electromagnetism, Heat and Thermodynamics and Mechanics covering major portion.

JEE Advanced Analysis 2020 Paper 2 – Chemistry

- 1.JEE Advanced Paper 2 of Chemistry was easy to moderate
- 2.It was calculative.
- 3.Physical and Organic chemistry sections had more questions.

JEE Advanced Analysis 2020 Paper 2 – Mathematics

- 1.The Maths section was Moderate to difficult.
- 2.Questions were asked within the syllabus.
- 3.Multi-correct type of questions consumed time due to calculations.

JEE Advanced Subject-Wise Analysis 2020 Paper 1

Candidates can find the JEE Advanced 2020 Paper 1 Subject-wise analysis here. Paper 1 is considered to be easy to moderate. The overall JEE Advanced Paper 1 question paper was lengthy. The questions required thinking ability to be solved.

JEE Advanced 2020 Paper 1 – Pattern:

- 1.Total questions in Physics, Chemistry and Maths were 54.
- 2.6 Single Choice questions were asked.
- 3.There were 6 numerical questions from each subject.
- 4.6 SAMCQs (+3, -1).

5. 6 MAMCQs (+4, -2).
6. 6 Numeric value type questions (+4, 0).

JEE Advanced Analysis 2020 Paper 1 – Physics

1. Physics section of JEE Advanced 2020 question paper was of moderate level with lengthy calculations.
2. The questions asked were within the syllabus.
3. In Physics, almost all questions were asked from Class 11 and 12 syllabi.
4. Chapters like Rotation, Work Power Energy, magnetism and Thermodynamics had more questions.

JEE Advanced Analysis 2020 Paper 1 – Chemistry

1. JEE Advanced Chemistry section was easy to moderate level.
2. All the questions asked were within the syllabus.
3. Physical chemistry had a little higher percentage of questions as compared to Organic & Inorganic chemistry.
4. Some tricky questions were asked from Inorganic chemistry.

JEE Advanced Analysis 2020 Paper 1 – Mathematics

1. JEE Advanced Analysis Paper 1 (Maths): The Maths part of the paper was a “little calculative and lengthy”.
2. Most of the questions were asked from Algebra and Calculus.
3. JEE Advanced 2020 Mathematics part was the toughest of all.
4. Candidates who are good at Mathematics found this section easier.
5. 6 questions were asked from Calculus. Questions were also asked from Continuity and Differentiability, Application of Derivative, Definite Integrals, Probability, Complex Numbers, Determinants and 3D Geometry.

JEE Main 2020 Analysis- September 6 Afternoon Session

Physics was difficult, Maths and Chemistry were easy

JEE Main 2020 Analysis September 6 2020 – Forenoon Session

Physics was the difficult section whereas Maths and Chemistry were easy

JEE Main 2020 Analysis – September 5, Afternoon Session

Physics

- 1 – Overall questions level were in Moderate level
- 2 – Physics portion overall was calculative and time taking
- 3 – More questions were from Class 11th than 12th Syllabus
- 4 – Almost every chapter of physics were covered in paper
- 5 – Mechanics was given more weightage in this paper
- 6 – Couple of question had been asked from SHM and Modern physics.

Chemistry

- 1 – Equal weightage of all topic Questions with majority of portion from organic chemistry
- 2 – Overall Paper level was moderate level questions
- 3 – Few questions covers inorganic chemistry portion
- 4 – Major portion of questions were from class 12
- 5 - Couple of the Questions from atomic structure surface chemistry and chemical kinetics

- 6 – Some of the questions were slightly time consuming as usual

Mathematics

- 1 – In Math's section, weightage were in 60-40 ratio from class 11th and 12th
- 2 – More questions were asked from class 11th
- 3 – Questions were slightly lengthy and time taking
- 4 – Couple of the Questions were directly NCERT Based
- 5 – Couple of questions were from quadratic equation statistics and matrix and determinant
- 6 – Math's Questions were in Moderate to Difficult level range.
- 7 – Major portion were from Calculus Questions
- 8 – Tricky Questions were also there

JEE Main Paper Analysis 2020 – September 5, Forenoon Session

Physics

- 1 – Overall Level of Questions were moderate to difficult
- 2 – Physics portion overall was calculative and time taking
- 3 – Equal questions were from 11th and 12th syllabus
- 4 – Almost every chapter of physics questions were covered in paper
- 5 – Mechanics was given more weightage in this paper
- 6 – Couple of question has been asked from waves and sound

Chemistry

- 1 – Equal weightage of all topic questions were given with majority of portion from organic chemistry
- 2 – Overall Paper level was easy to moderate with more moderate level questions
- 3 – Few questions covers inorganic chemistry portion
- 4 – Major portion of questions were from class 12
- 5 – Couple of the Questions from solid state surface chemistry and biomolecule
- 6 – Few questions were time consuming questions than usual
- 7 – Some of the questions were slightly time consuming as usual

Mathematics

- 1 – In Math's section, weightage was in 55-45 ratio from Class 11th and 12th
- 2 – More of questions were from class 11th
- 3 – Questions were slightly lengthy and time taking
- 4 – Couple of the Questions were directly NCERT based
- 5 – Few are time consuming questions than usual
- 6 – Couple of questions were from probability and matrix and determinant
- 7 – All Maths's Questions are in Moderate to Difficult Level range.
- 8 – Major portion from Calculus Questions
- 9 – Few of the tricky questions were also asked

JEE Main 2020 Analysis – September 4, Afternoon Session

Physics

- 1 – Overall level of questions were comparative moderate to difficult level
- 2 – Physics portion overall on moderate side but some questions were difficult
- 3 – Equal questions are from both class 11th and 12th Syllabus
- 4 – Almost every chapter of physics questions were covered in the exam
- 5 – Mechanics was given more weightage in this paper
- 6 – Couple of questions are from unit and dimension gravitation and sound.

Chemistry

- 1 – Equal weightage to all topic questions
- 2 – As usual majority of portion was from organic chemistry.
- 3 – Paper level was moderate in comparison to other sections
- 4 – Weightage of questions are in 40-60 ratios from Class 11th and 12th
- 5 – More questions were from class 12
- 6 – Some of questions from periodic table and colligative properties
- 7 – Some questions were slightly time consuming as usual

Mathematics

- 1 – In Math's section weightage were in 45-55 ratio from Class 11th and 12th
- 2 – Questions were slightly difficult and time taking
- 3 – Few of the questions were very simple
- 4 – Few are time consuming questions than usual
- 5 – Each topic covers equally with couple of questions from probability and matrix and determinant
- 6 – All Math's Questions were in Moderate to Difficult level range

JEE Main 2020 Paper Analysis – September 4, Forenoon Session

Physics

- 1 – Overall Level of Questions were comparative easy to moderate
- 2 – 60% questions were from Class 12th Syllabus
- 3 – Every topic of the syllabus had a question related to it
- 4 – Mechanics was given more weight-age in this paper
- 5 – Some of the questions were based on waves and sound

Chemistry

- 1 – Equal weightage of all topic Questions were given with a majority of portion from organic chemistry
- 2 – More questions were asked from Class 12 th
- 3 – Questions were directly based on NCERT
- 4 – This section was comparatively time consuming

Mathematics

- 1 – This section consisted of 60-40 ratio from Class 11th and 12th
- 2 – Slightly more questions were from class 11th
- 3 – This section was slightly lengthy and time taking
- 4 – Some of the questions were directly NCERT Based
- 5 – Couple of questions were from probability and matrix and determinant
- 6 – All Math's Questions were in Moderate to Difficult level range
- 7 – Major part of the question paper were from Calculus Questions
- 8 – Consisted of quite a few tricky questions as well

JEE Main 2020 Analysis – September 3, Afternoon Session

Physics

- 1 – Overall Level of Questions were comparatively difficult
- 2 – 60 -65% questions were from Class 11th Syllabus
- 3 – Questions covered almost every chapter of physics
- 4 – Mechanics was given more weightage in this paper

Chemistry

- 1 – Paper was quite balanced covering entire syllabus
- 2 – Atleast one question from each chapter was asked
- 3 – Questions were slightly more from class 12 syllabus
- 4 – Most of the questions were of easy or moderate level

Mathematics

- In Math's marks weightage are in 40-60 ratio from 11th and 12th
Majority of questions were lengthy and time taking
Time consuming questions than usual
3 questions from coordinate geometry
7 questions from complete Calculus
Algebra has equal weightage of all topics
3 questions from vector and 3-dimensional geometry.
All Math's Questions are in Moderate to Difficult Level range.
Tricky Questions from more topics

JEE Main 2020 Analysis – September 3, Forenoon Session

Physics

- 1 – Overall Level of Questions were comparatively moderate in comparison to last year's
- 2 – This section was moderate however many question were based on calculations
- 3 – 60% questions were based on Class 12th syllabus
- 4 – Questions were based on every topic
- 5 – Modern physics was given more weightage
- 6 – No questions were from waves and sound

Chemistry

- 1- Equal weightage were given to all the topics
- 2- Difficulty level was moderate
- 3- Questions were based on Class 12th syllabus
- 4- Maximum questions were based on NCERT

Mathematics

- 1- Weightage were in 40-60 ratio from 11th and 12th syllabus
- 2- Majority of questions were lengthy and time taking
- 3- Some of the Questions were directly NCERT Based
- 4- Some questions were very time consuming
- 6- Couple of questions were based on probability, sequence & series and matrix and determinant
- 7- Some questions were based on Calculus
- 8- This section consisted of many tricky questions

JEE Main 2020 Paper Analysis – September 2, Afternoon Session

Chemistry

Equal weightage of questions from all topics but majority from 12th based syllabus
Majority of NCERT Based Questions
Questions from Organic Chemistry were moderate
Chemistry section was less time consuming

Mathematics

In Math's question weightage are in 40-60 ratio from 11th and 12th syllabus
Lengthy and time taking questions had come
Weightage to Calculus was given
Tricky and calculative Questions

Physics

Overall difficulty level of easy in was comparison to previous year's
Physics portion was moderate but calculative
More Questions were from Class 12th Syllabus
Major portion of Electrodynamics Questions had come.
This section was also little bit time consuming.

JEE Main 2020 Paper Analysis – September 2, 2020- Shift 1

overall exam was moderately difficult. Physics was the toughest followed by Mathematics & Chemistry (had mostly theoretical questions). Mathematics section was thoroughly divided having questions from complex number, sequences and series (1 from GP and one from AP). However, questions from numerical values were very easy.

JEE Main 2020 Paper Analysis

JEE Main Analysis 2020: 9th January (Shift 2)

1. There was an equal weightage of questions from the 12th and 11th classes.
2. In Mathematics, the dominated topics were Algebra and Continuity & differentiability and Trigonometry, Vector, 3D, Probability, and AP.
3. Chemistry had questions from Anti-Markovnikov reaction, Markovnikov reaction, Ideal gas equations, Thermal Expansion, etc.
4. In Physics, some questions were asked from Wheatstone bridge and resistance.
5. Overall, the paper was a moderate difficulty.

JEE Main Analysis 2020: 9th January (Shift 1)

Physics

1. Grade-wise Weightage: 11th class (44%) and 12th class (56%)
2. More than one question was asked from chapters like Laws of Thermodynamics, Work, Power & Energy, EMI, Rotation, Photoelectric Effect & EMW, Wave Optics, Magnetism.
3. No Questions were asked from Kinematics, Semiconductor Devices, Communication, Nuclei, and Sound Wave.
4. Two questions are conceptual with a high difficulty level
5. Questions are lengthy with calculations
6. Overall paper is easy to moderate
A student with full coverage of syllabus can score good marks

Chemistry

1. Grade-wise Weightage: 11th (52%), 12th (48%)
2. Chapters with more than one questions: Carbonyl Compounds (2), Solutions and Colligative Properties (2), Mole Concept (2), Coordination Chemistry (2)
3. No questions were asked from topics includes Surface Chemistry, Solid State, Ionic Equilibrium, Gaseous State, Salt Analysis, Polymers and Carboxylic Acids.
4. Difficulty Level: Average (4.36), Standard Deviation (0.70)
5. Three questions are conceptual with a high difficulty level
6. Overall paper was moderate
Questions were more numerical as compare to the previous two days' papers

Mathematics

Mathematics

1. Grade-wise Weightage: 11th (48%), 12th (52%)
 2. Section with more than one questions: Application of Derivative (2), Definite Integration (2), Vectors and 3D (2), Matrices and Determinants (2)
 3. No question was asked from Area under Curves, Parabola, Sets and Relations, Heights and Distances, Mathematical Induction
 4. In most of the questions, the calculation was very less.
- Overall mathematics paper was easy to moderate level.

JEE Main Analysis 2020: 8th January (Shift 2)

Chemistry

1. There are mostly Theory-Based questions
 2. Overall, Chemistry is a moderate level paper. A Good level of questions from organic chemistry
 3. Twelve questions were asked from the 11th class syllabus and 13 questions from 12th standard
 4. No question from solid-state, surface Chemistry, solutions, redox reactions, etc.
 5. There is a direct question from Polymer and Biomolecules topics
 6. Mostly questions are asked from NCERT
- All Chemistry Questions are in Moderate Level and Less Time Consuming

Mathematics

1. In Maths equal questions from 11th and 12th Syllabus
 2. Questions from Trigonometry were a very simple question
 3. All maths Questions are in Moderate Level.
 4. Somehow Lengthy & Little Time Consuming (As like Every Year)
 5. One tricky question from ITF topic
 6. P&C Quadratic Equation Function and ITF have 1 tough question
 7. There are Differential & Quadratic equations Questions
- No question from straight-line LCD, Indefinite Integration and Sets Relation

Physics

1. In the physics section, mostly questions covered from all the topics of the syllabus
 2. The paper level was moderate but higher than all till date also lengthy among past three papers
 3. Two questions from current electricity, electrostatics, modern physics, and the center of mass.
 4. No questions from the projectile, NLM, Friction, WPE, SHM, Communication, and AC
- All Physics Questions are in Moderate Level and less time consuming

JEE Main Analysis 2020: 8th January (Shift 1)

Physics

1. 48% of the questions were asked from 11th class while 52% were from 12th class.
 2. More than one question was asked from some chapters like Geometrical Optics (3 Questions), Electrostatics, Current Electricity, Center of Mass (2 Questions).
 3. There were some chapters from which no questions were asked, these were Communication, Nuclei, Circular Motion, NLM, SHM, AC.
 4. The difficulty level on the score of 10 was 4.08 (which is moderate).
 5. Two questions were conceptual with a high difficulty level
 6. Overall speaking, the paper was easy to moderate.
 7. A good number of questions are based on graphs on different topics.
 8. The question of the Gauss theorem is conceptually difficult.
 9. Most of the questions were lengthy where calculations were required.
 10. An average of 90.6 seconds was required to solve each question.
- A student with full coverage of syllabus can score good marks

Chemistry

1. 48% of the questions were asked from 11th class while 52% were from 12th class.
 2. More than one question was asked from some chapters like Mole Concept, General Organic Chemistry, Ionic Equilibrium.
 3. There were some chapters from which no questions were asked, these were Chemical Equilibrium, Solid State, Gaseous State, Redox Reactions, Hydrogen, Aldehyde & Ketone, Metallurgy.
 4. The difficulty level on the score of 10 was 4.32 (which is moderate).
 5. Three questions are conceptual with the high difficulty level
 6. Overall speaking, the paper was moderate.
 7. Most of the questions were theoretical. An average of 64.2 seconds was required to solve each question.
- A student with full coverage of the syllabus can score good marks.M

Mathematics

1. 44% of the questions were asked from 11th class while 56% were from 12th class.
2. More than one question was asked from some chapters like the application of Derivative (3 Questions), Matrices and Determinants (2 Questions), Vectors and 3D (2 Questions) and Sequence and Series (2 Questions)
3. There were some chapters from which no questions were asked, these were Circle, Hyperbola, Definite Integration, Sets and Relations, Heights and Distances, Mathematical Induction.
4. The difficulty level on the score of 10 was 3.88.
5. Trigonometry Unit is completely missing except a portion of Inverse Trigonometric Functions.

Overall speaking, the paper was of moderate level.

JEE Main Analysis 2020: 7th January (Shift 2)

Mathematics

1. The Mathematics paper was also tough because it involved most of the calculations.
2. Around 12 questions were asked from the 11th class syllabus.
3. questions were asked from the 12th class 12 syllabus.
4. About eight questions were asked from Calculus and Algebra section.
While about three questions were asked from Coordinate Geometry, two from Vector 3D and one from Trigonometry.

Physics:

1. In Physics, the no. of questions asked from class 11th and 12th was almost the same.
2. The calculations part was the maximum in the paper.
3. One of the semiconductor topics asked in the paper was incomplete or out of the syllabus.
4. Questions related to the Carnot engine were also asked in both shifts.
Overall the paper was lengthy and moderate level.

Chemistry:

1. Almost 14 to 15 questions were asked were from the 12th class syllabus.
2. Organic chemistry has given weightage.
3. The no. of questions from Physical Chemistry was comparatively lesser than Organic and Inorganic Chemistry.
4. No questions were asked from the Topical Environmental Chemistry and F Block.
5. Everyday Life was asked on the other hand questions from Chemistry
Overall Chemistry was the easiest section when compared with the other two sections

JEE Main Analysis 2020: 7th January (Shift 1)

Physics

1. 44% of the questions were asked from 11th class while 56% were from 12th class.
2. More than one question was asked from some chapters like Laws of Thermodynamics (3 Questions) Work, Power & Energy, EMI, Rotation, Photoelectric Effect & EMW, Wave Optics, Magnetism (2 Questions)
3. There were some chapters from which no questions were asked, these were Kinematics, Semiconductor Devices, Communication, Nuclei, Sound Wave.
4. The difficulty level on the score of 10 was 4.04 (which is moderate).
5. Two questions were conceptual with a high difficulty level
6. Overall speaking, the paper was easy to moderate.

7. Most of the questions were lengthy where calculations were required.
8. An average of 94.2 seconds was required to solve each question.
A student with full coverage of the syllabus can score good marks.

Chemistry

1. 40% of the questions were asked from 11th class while 60% were from 12th class.
2. More than one question was asked from some chapters like Coordination Compounds, Chemical Bonding and Molecular Structure, Atomic Structure, Carboxylic Acids.
3. There were some chapters from which no questions were asked, these were Chemical Equilibrium, Solid State, Surface Chemistry, Polymers, Chemical Kinetics.
4. The difficulty level on the score of 10 was 4.48 (which is moderate).
5. Three questions are conceptual with the high difficulty level
6. Overall speaking, the paper was easy to moderate.
7. Most of the questions were theoretical. An average of 86.4. seconds were required to solve each question.
The student with full coverage of the syllabus can score good marks.

Mathematics

1. 44% of the questions were asked from 11th class while 56% were from 12th class.
2. More than one question was asked from some chapters like Application of Derivative (3 Questions), Matrices and Determinants (2 Questions), Vectors and 3D (2 Questions), and Sequence and Series (2 Questions)
3. There were some chapters from which no questions were asked, these were Circle, Hyperbola, Definite Integration, Sets and Relations, Heights and Distances, Mathematical Induction.
4. The difficulty level on the score of 10 was 3.88.
5. Trigonometry Unit is completely missing except a portion of Inverse Trigonometric Functions.
Overall speaking, the paper was easy to moderate.

Analysis JEE Main 2019

The duration of the JEE Main 2019 was 03 hours and consisted of MCQ type questions only. Both Paper 1 and Paper 2 were conducted in online mode by NTA. The paper 1 exam was of a total of 360 marks and the paper 2 exam contained 390 marks. The January attempt of JEE Main 2019 was held on January 08, 09, 10, 11 and 12, 2019. The exam was entirely in online mode.

JEE Main 2019: Analysis and Review of Paper I (12 January – Shift 2)

The overall difficulty level of the paper was moderate.

The **Toughest** section was **Mathematics**.

Physics was the most **easiest** section.

The **time consuming** section was **Chemistry**.

JEE Main 2019: Analysis and Review of Paper I (12 January – Shift 1)

The overall difficulty level of the paper was moderate.

The **Toughest** section was **Maths**.

Physics was the most **time consuming** section.

The **easiest** section was **Chemistry**.

JEE Main 2019: Analysis and Review of Paper I (11 January – Shift 2)

Mathematics was **Moderate but lengthy**

Physics was **Tough and time consuming**

Chemistry was **Easiest as well as scoring**

JEE Main 2019: Analysis and Review of Paper I (11 January – Shift 1)

Mathematics was **Moderate but lengthy and time consuming**

Physics was **Difficult as well as lengthy**

Chemistry was **Easy and scoring**

JEE Main 2019: Analysis and Review of Paper I (10 January – Shift 2)

The overall difficulty level of the paper was tough.

The **Toughest** section was **Physics**.

Maths was the most **time consuming** section.

The **easiest** section was **Chemistry**.

JEE Main 2019: Analysis and Review of Paper I (10 January – Shift 1)

The overall difficulty level of the paper was moderate.

The **Toughest** section was **Maths**.

Physics was the most **time consuming** section.

The **easiest** section was **Chemistry**.

Most of the questions in **Chemistry** paper were from **CBSE Class 11 and Class 12 NCERT Books**

JEE Main Analysis 2019: Paper I (9 January – Shift 2)

Mathematics was **Moderate but time consuming**

Physics was **Difficult and lengthy**

Chemistry was **Easy**

JEE Main Analysis 2019: Paper I (9 January – shift 1)

Mathematics was **Moderate to Difficult**

Physics was **Moderate but time consuming**

Chemistry was **Easy but lengthy**

-12 April 2019-

Both the shifts on the last day of JEE Main 2019 April session were moderate in difficulty level. From physics being the toughest section to mathematics being a bit lengthy. Chemistry has been easy to solve throughout the session. There were topics in every section that were frequent in all shifts such as mechanics, optics in physics. coordinate geometry, trigonometry, probability in mathematics. However, topics in chemistry were equally distributed.

-10 April 2019-

The examination on April 10th 2019 was of moderate difficulty level. Physics was the toughest section in both the shifts. Mathematics in the first shift was found to be difficult however, in the 2nd shift Mathematics was comparatively easy. Chemistry was easiest throughout the session.

-9 April 2019-

Both the shifts for JEE Main 2019 was found to be of a moderate level. Candidates from the first shift found the physics section toughest while in the second shift mathematics was the toughest. Chemistry, however, was the easiest of all. In the physics section, more questions were from CBSE Class 11th and were found to be difficult. Chemistry in both the shifts had equal weightage of organic, inorganic and Physical. Mathematics had more questions from trigonometry, coordinate geometry and parabola.

-8 April 2019-

The physics section was the toughest of all three sections. Furthermore, the mathematics section of paper 1 was easy. Chemistry, as usual, was the easiest, although student found the chemistry paper of January session easier.

-7 April 2019-

It was the easiest of all the papers conducted in april session .Physics was the most easiest followed by chemistry and mathematics.

JEE Main 2019 Qualifying Cutoff

Category	Total NTA Score Cutoff Based on Paper 1
Common Rank List (CRL)	89.7548849
GEN-EWS	78.2174869
Other Backward Classes (OBC-NCL)	74.3166557
Scheduled Caste (SC)	54.0128155
Scheduled Tribe (ST)	44.3345172
PwD	0.11371730

JEE Advanced Cutoff 2019

Category	Minimum Percentage of Marks in Each Subject	Minimum Percentage of Aggregate Marks	Revised Cutoff
Common rank list (CRL)	10.0	35.0	25.0
GEN-EWS rank list	9.0	31.5	22.5
OBC-NCL rank list	9.0	31.5	22.5
SC rank list	5.0	17.5	12.5
ST	5.0	17.5	12.5
Common-PwD rank list (CRL)	5.0	17.5	12.5
OBC-NCL-PwD rank list	5.0	17.5	12.5
SC-PwD rank list	5.0	17.5	12.5
ST-PwD rank list	5.0	17.5	12.5
Preparatory course rank lists	2.5	8.75	6.25

Analysis of JEE Mains 2018

Central Board of Secondary Education (CBSE) conducted JEE Mains 2018 offline exam (Pen and paper mode) on April 8th and online exam (Computer Based Test) on 15th and 16th of April 2018. The examination was conducted across 258 centers and around 12.5 lakhs students appeared for this examination. Around 2,24,000 students qualified for appearing in the advanced level of examination i.e. JEE Advanced which was scheduled on May 20th, 2018.

The question paper had a total of 30 questions (120 Marks) from each chemistry, physics, and mathematics. All the questions were objective type multiple choice questions. 4 marks were awarded for every correct answer and 1 mark was deducted for each wrong answer. Questions left unattempted were excluded from any negative markings. The difficulty curve of JEE Mains 2018 question paper was in between moderate to tough.

JEE Main Exam 2018: Top three rank holders

Rank 1: Suraj Krishna from Vijayawada, Andhra Pradesh; scored 350
Rank 2: K V R Hemant Kumar Chodipilli from Andhra Pradesh; scored 350
Rank 3: Parth Laturia from Rajasthan; scored 350
Total candidates registered for Paper 1 JEE Main 2018: 11,35,084
Boys: 815005 , Girls: 320077 , Transgenders: 2
Total candidates qualified for JEE Advanced 2018: 2,31,024
Boys: 180331 Girls: 50693

JEE Main 2018 Qualifying Cutoff

Category	Qualified	Max Marks	Min Marks
Common Rank List	111275	350	74
OBC-NCL	65313	73	45
SC	34425	73	29
ST	17256	73	24
PwD	2755	73	-35
Total	231024		

JEE Main 2018 Chemistry paper chapter-wise distribution

Topic	Number of Ques.
Atomic Structure	1
Solid State	1
Surface Chemistry	1
Chemical Kinetics	1
Solutions	1
Thermodynamics	1
Stoichiometry	2
Equilibrium	1
Redox	2
Thermo chemistry	1
Electrochemistry	1
Aromatic Isomerism	1
Polymers	1
Biomolecule	1
Hydrocarbon	2
Acid derivative	1
Environmental Chemistry	1
G.O.C	3
Carboxyl	1
Periodic Table	1
S-Block	1
Group-17	1
Coordination	1
Chemical Bonding	1
D-Block	1
Total	30

Class Wise Marks Distribution – Chemistry

Section Total	Total Questions	Units From where the Easy Questions were asked
Class 12th Syllabus	14 Questions	Electrochemistry, Solutions, Solid State, Biomolecules, Chemistry in Everyday Life
Class 11th Syllabus	16 Questions	Chemical Thermodynamics, Chemical Bonding, Hydrocarbons, P-block Elements

Topic Wise Marks Distribution – Chemistry

Topics	Total Marks
Physical Chemistry	48
Inorganic Chemistry	28
Organic Chemistry	44
Total	120 Marks

CHEMISTRY ANALYSIS OF JEE Main 2018

Overall, JEE Mains 2018 chemistry section was easy (easiest amongst the other two) and the students scored good marks in this section. The questions were a mix of theory based and calculative. This section had 7 extremely difficult questions, 14 moderate and 9 easy questions.

Tough	Moderate	Easy
Alcohols Phenols and Ethers Coordination compounds	Bio molecules Chemistry in everyday life Electrochemistry Solid state solutions Chemical Bonding P-block Elements	Chemical thermodynamics Hydrocarbons Purification and characteristics of organic compounds

JEE Main 2018 physics paper chapter-wise distribution

Topic	Number of Ques.
Error and Sig. Figure	1
1D Motion	1
Work Power and Energy	1
Momentum Collision	2
C.O.M and M.I	1
Rotational Mechanics	1
Gravitation	1
S.H.M	1
Elasticity	1
Heat	2
Wave and Sound	4
Current Electricity	2
Electrostatics	2
Capacitor	2
Electromagnetism	2
Geometrical Optics	1
Wave Optics	1
Modern Physics	4
Total	30

Class Wise Marks Distribution – Physics

Section Total	Total Questions	Units From where the Easy Questions were asked
Class 12th Syllabus	17 Questions	Magnetism, Solutions, Electromagnetic Induction, Magnetic Effects of Current, Electronic Devices
Class 11th Syllabus	13 Questions	Motion in a plane, Kinematics, Friction, Gravitation, Surface Tension

Topic Wise Marks Distribution – Physics

Topics	Total Marks
Mechanics	44
Electrodynamics	48
Thermodynamics	8
Optics	8
Modern and Nuclear Physics	12
Total	120 Marks

Overall, JEE Mains Physics section was the toughest and the questions were more conceptual than calculative.

PHYSICS ANALYSIS OF JEE Main 2018

Physics was the toughest paper (as students were of the opinion that time consuming calculations were there in paper) amongst the three . The questions were a mix of theory based and calculative .This section had 1 difficult question , 19 moderate and 10 easy questions.

Tough	Moderate	Easy
Electro magnetic waves electrostatics	Electromagnetic induction Electronic devices Magnetic effect of current and Magnetism Dual nature of matter and radiation Capacitors	Kinematics Measurements and errors

JEE Main 2018 Mathematics paper chapter-wise distribution

Topic	Number of Ques.
Differential Calculus	6
Integral Calculus	4
Algebra	10
Coordinate Geometry	4
Trigonometry	2
3D and Vector	3
Reasoning and Statistics	1
Total	30

Class Wise Marks Distribution – Mathematics

Section Total	Total Questions	Units From where the Easy Questions were asked
Class 12th Syllabus	10 Questions	Differential Equations, 3D Geometry, Application of Integration, Matrices, Inverse trigonometry
Class 11th Syllabus	20 Questions	Motion in a plane, Kinematics, Friction, Gravitation, Surface Tension

Topic Wise Marks Distribution – Mathematics

Units	Total Marks
Calculus	28
Algebra	56
Conics	16
Trigonometry	8
Vector Algebra	12
Total	120 Marks

There were an equivalent number of difficult and simple questions, on a computational basis. Questions were based on simple formulas, but they were long in terms of calculations. This section required a lot of time. Overall the questions asked in **JEE Mains** Mathematics section were easier in comparison to the last few years question papers. Mathematics was the moderately tougher paper amongst the three. The questions were calculative. This section had 5 extremely difficult questions, 13 moderate and 12 easy questions.

Tough	Moderate	Easy
Hyperbola Parabola Sets, relations and functions	3D geometry Determinants Differential equations Mathematical induction and reasoning Sequences and series Trigonometry	Permutations and combinations Quadratic equations Statistics

OVER ALL Type of Questions

	Easy	Medium	Difficult
Physics	10	19	1
Chemistry	9	14	7
Mathematics	12	13	5
Overall	31	46	13

Although the difficulty level is not the same for everyone, it also cannot be perfectly analyzed, but this analysis can apparently be considered the general one, considering that simple questions are ones that seemingly get done by all. Although the paper didn't diverge much with respect to the patterns from the last couple of years, in 2018 only on the medium-sized difficulty level of questions were asked. A number of simple questions were proportionally more than the other two categories as compare to last year, but due to the severity of the other questions, the general difficulty for the paper was REASONABLY HARD. The total scores for simple questions were around 120 and moderate questions were around 180 and the rest were for hard questions.

JEE Advanced Cutoff 2018

Category	Minimum Percentage of Marks in Each Subject	Minimum Percentage of Aggregate Marks
Common rank list (CRL)	10.0	25.0
OBC-NCL rank list	9.0	22.5
SC rank list	5.0	12.5
ST	5.0	12.5
Common-PwD rank list (CRL)	5.0	12.5
OBC-NCL-PwD rank list	5.0	12.5
SC-PwD rank list	5.0	12.5
ST-PwD rank list	5.0	12.5
Preparatory course rank lists	2.5	6.25

JEE Advanced IIT Bombay Cutoff 2018

Engineering Branches	Categories	Opening Rank	Closing Rank
Aerospace Engineering	General	1040	2053
	OBC	740	1074
	SC	235	492
	ST	56	230
Chemical Engineering	General	653	1721
	OBC	539	975
	SC	211	626
	ST	148	332
Civil Engineering	General	1443	2544
	OBC	601	1088
	SC	172	439
	ST	93	139
Computer Science & Engineering	General	1	59
	OBC	9	37
	SC	1	14
	ST	1	9
Electrical Engineering	General	43	265
	OBC	50	177
	SC	17	76
	ST	14	45
Mechanical Engineering	General	305	848
	OBC	117	449
	SC	38	180
	ST	11	67
Metallurgical Engineering and Material Sciences	General	1010	3154
	OBC	1134	1603
	SC	667	1024
	ST	503	633

Analysis of JEE Mains Exam 2017

The CBSE Board had announced JEE Main Results 2017 in the afternoon at 1pm on April 27.

CBSE JEE Mains Exam 2017: Top three rank holders

Girls category

Rank 1: Vrunda Nandkumar Rathi; Score: 321 (Overall rank 71)

Rank 2: Poorva Garg; Score: 319 (Overall rank 96)

Rank 3: Narayana Jeevana Reddy; Score: 318 (Overall rank 102)

Boys category

Rank 1: Kalpit Veerwal; Score: 360

Rank 2: Vasu Jain; Score: 350

Rank 3: Ananye Agarwal; Score: 350

JEE Mains Exam 2017

Rank 1: Kalpit Veerwal; Score: 360 (Limca book of records)

Kalpit Veerwal addressing RADHASAI IIT/NEET students in RADHASAI - IIT/NEET coaching center.



JEE Main 2017 paper was similar in pattern to JEE Main 2016, Overall the paper was simpler compared to last year. Mathematics appeared to be relatively tougher. However, to score well in this paper a student should have done Physics and Chemistry quickly and the time saved here could have been used for Mathematics. There were 30 questions in each subject. Each section of the paper was of 120 marks, which means a total of 360 marks.

Physics was relatively simpler than last year. There were 17 questions from class XII syllabus and 13 from class XI syllabus. Most of the questions were from topics generally covered for the JEE preparation. Some important topics like Mechanical Waves and Sound and Uniform Circular Motion were completely missing. Most of the questions involved easy calculations.

Chemistry was simplest of all the three subjects. There were 18 questions from class XII syllabus and 12 from class XI syllabus. The paper was balanced covering all the topics. The paper was more conceptual compared to last year.

Mathematics was tougher than last year with mostly lengthy questions, thus, increasing the chances of making mistakes. There were 18 questions from class XII syllabus and 12 from class XI syllabus. There were 3 questions from probability which was quite high.

The level of difficulty of the paper was as follows:

Difficulty	Easy	Moderate	Difficult
Physics	11	17	2
Chemistry	18	9	3
Mathematics	7	16	7
Total	36	42	12

Physics:

Topic	2009	2010	2011	2012	2013	2014	2015	2016	2017
Units, Dimensions, Errors, Experiments	1	1	1	2	1	2	1	2	1
Kinematics	2	3	2	2	1	1	1	0	1
Newton's Laws and Friction	0	1	0	1	1	1	1	0	1
Work, Power & Energy	1	1	0	1	0	1	0	2	1
System of Particles	1	2	0	1	1	1	2	1	0
Gravitation, Rotational Mechanics	1	1	4	1	2	2	2	2	3
Properties of Matter	1	1	2	2	1	4	1	0	1
SHM, Oscillations	1	0	2	1	1	1	1	1	1
Mechanical Waves and Sound	2	1	1	1	1	1	1	2	0
Ray Optics, Wave Optics	3	3	4	3	4	3	3	3	3
Heat and Thermodynamics	5	1	4	3	3	2	3	3	4
Electrostatics	3	4	2	2	3	2	3	2	2
Current Electricity	1	1	3	2	3	1	2	2	4
Magnetism, Magnetic effects of current	2	1	1	3	2	2	3	2	1
EMI, AC and EM waves and Communication	1	3	1	1	2	3	4	3	2
Modern Physics	5	6	3	4	4	3	2	5	5
Total	30	30	30	30	30	30	30	30	30

Chemistry :

Topic	2009	2010	2011	2012	2013	2014	2015	2016	2017
Atomic Structure and Classification	3	3	3	2	3	2	2	1	2
Chemical Bonding	1	0	3	2	4	2	1	1	1
Stoichiometry	0	0	1	1	3	0	1	1	2
States of Matter	1	3	2	2	2	3	1	1	1
Chemical & Ionic Equilibrium	1	4	1	2	1	0	1	1	1
Chemical Kinetics & Nuclear Chemistry	1	2	2	1	1	1	1	1	1
Chemical Thermodynamics	2	2	1	1	1	1	1	1	2
Solutions	2	2	2	1	0	1	1	1	1
Electrochemistry	1	2	1	1	1	3	1	1	1
General Organic Chemistry + Functional Group-I	5	6	2	5	4	3	3	6	3
Organic Chemistry + Functional Group-II	2	1	2	3	1	3	2	0	4
Organic Chemistry + Functional Group-III	1	1	2	1	2	2	1	1	2
Chemistry of Representative Elements	3	0	2	3	2	5	7	6	4
Transition Elements	2	0	1	1	2	1	3	2	1
Coordination Compounds & Organometallics	2	2	4	2	1	1	1	2	1
Surface Chemistry	1	0	0	1	1	0	0	1	1
Biomolecules	2	2	1	1	1	2	3	3	2
Total	30	30	30	30	30	30	30	30	30

Mathematics :

Topic	2009	2010	2011	2012	2013	2014	2015	2016	2017
Sets, Relations and Functions	2	2	2	1	1	2	1	1	1
Limits, Continuity & Differentiability	1	2	3	1	2	1	3	2	2
Application of Derivatives	3	3	2	2	3	2	1	2	2
Indefinite and Definite Integrals & Area under the Curve	2	2	2	3	3	3	3	3	3
Cartesian coordinates & Straight Line	1	1	1	2	2	2	2	1	1
Circles	1	1	1	1	1	1	1	2	1
Conics	3	1	1	2	2	2	2	2	2
Quadratic Equations, Inequalities, Progressions	3	1	1	3	3	4	3	3	3
Complex Numbers	1	2	2	1	1	1	1	1	1
Binomial Theorem, Exponential & Logarithmic Series	1	1	1	1	1	1	1	1	1
Permutation & Combination	1	2	1	2	1	0	1	1	1
Probability	2	2	2	1	1	1	1	1	3
Vectors	2	2	2	2	1	1	1	1	1
3-D Coordinate Geometry	1	2	2	2	2	2	2	2	2
Differential Equations & Properties of Triangles	1	1	2	1	1	1	1	1	1
Trigonometry and Inverse Circular Function	1	2	1	1	1	1	1	1	1
Heights and Distances	0	0	0	0	0	1	1	1	1
Matrices & Determinants	2	2	2	2	2	2	2	2	2
Mathematical Logic	1	0	1	1	1	1	1	1	1
Statics & Dynamics	0	0	0	0	0	0	0	0	0
Statistics	1	1	1	1	1	1	1	1	0
Total	30	30	30	30	30	30	30	30	30

JEE Main Cut off Trends (2013-2017)

S.No.	Category	2017	2016	2015	2014	2013
1	General	81	100	105	115	113
2	OBC - NCL	49	70	70	74	70
3	SC	32	52	50	53	50
4	ST	27	48	44	47	45

Category wise Cutoff of JEE Main 2017 and Number of Candidates declared Eligible for JEE Advanced 2017

S.No.	Category	Cut Off	Number of Candidates
1	General	81	109585
2	OBC - NCL	49	60299
3	SC	32	33333
4	ST	27	16096
5	PWD	1	2114
	Total	-	221427

JEE Advanced - 2017 Analysis

1.7 lakhs of students appeared out of the 2.2 lakhs who qualified for the JEE Advanced 2017 in their fight for seats in the prestigious IITs. JEE Advanced is the only qualifying exam for the IITs.

JEE Advanced 2017 Paper 1 Analysis

The JEE Advanced Paper 1 covered multiple choice questions, integer type questions, as well as the three-column matrix match. Overall, Paper 1 of JEE Advanced 2017 was designed with a good mixture of conceptual and tricky questions.

1. The JEE Advanced 2017 Paper 1 carried a total of 183 marks.
2. The booklet had 36 printed pages and 54 questions in total.
3. Duration of the exam was 3 hours.
4. JEE Advanced Paper 1 has 3 parts – Physics, Chemistry, and Mathematics.
5. Each subject is allotted 61 marks.
6. In each part, there were three sections: Section 1 (Maximum marks – 28), Section 2 (Maximum marks – 15) and Section 3 (Maximum marks – 18).
7. Section 1 of the JEE Advanced 2017 Paper 1 had 7 questions with 4 options in which one or more than one options were correct. Marking scheme in this section is +4 in case all options are correct, +1 for each correct response, 0 marks for no response and -2 for all other cases. Maximum marks for this section was 28.
8. Section 2 had 5 questions with correct response being a single digit integer from 0 to 9, both inclusive. The marking scheme was +3 for the correct response and 0 marks in all

other cases. Maximum marks for this section was 15.

9. Section 3 had 6 questions of matching type. This section contained two tables (each having 3 columns and 4 rows). Based on each question, there were 4 options in which only one option was correct, with correct response being a single digit integer from 0 to 9, both inclusive. Marking scheme in this section was +3 if the correct option is marked, 0 marks if none of the options is marked and -1 in all other cases. Maximum marks for this section was 18.

JEE Advanced 2017 Exam Difficulty Level – Paper 1

Subject	Standard Deviation	Average Difficulty Level
Chemistry	1.11	5.22
Mathematics	0.76	5.11
Physics	1.32	5.11

There were 54 questions and, overall, it was easier in comparison to 2016.

Chemistry: This section was difficult in comparison with Mathematics. On a scale of 10, maximum questions were distributed among difficulty levels 4 to 7.

Physics: This section was also difficult in comparison with last year. Maximum questions were distributed amongst difficulty levels 5 and 6.

Mathematics: This section was the easiest. Maximum questions were of difficulty level 4, 5 and 6.

JEE Advanced 2017 Paper 2 Analysis

In the JEE Advanced 2017 Paper 2, there were more than one option correct type questions, single option correct type questions, and paragraph type questions with respect to the types of questions. It seemed relatively more difficult than Paper 1.

- The JEE Advanced 2017 Paper 2 carried a total of 183 marks.
- The booklet had 36 printed pages and 54 questions in total.
- Duration of the exam was 3 hours.
- JEE Advanced Paper 2 has 3 parts – Physics, Chemistry, and Mathematics.
- Each subject is allotted 61 marks.
- In each part, there were three sections: Section 1 (Maximum marks – 21), Section 2 (Maximum marks – 28) and Section 3 (Maximum marks – 12).
- Section 1 had 7 questions with 4 options in which only one option was correct. Marking scheme in this section was +3 in case the option was correct, 0 marks for no response, -1 mark for all other cases. Maximum marks for this section was 21.

- Section 2 had 7 questions with 4 options in which one or more than one options were correct. Marking scheme in this section was +4 in case all options are correct, +1 for each correct response, 0 marks for no response and -2 for all other cases. Maximum marks for this section was 28.
- Section 3 had 2 paragraphs with 2 questions in each paragraph. Each question had 4 options with only one correct option. Marking scheme in this section is +3 if the correct option is marked, 0 marks in all other cases. Maximum marks for this section was 12.

JEE Advanced 2017 Exam Difficulty Level – Paper 2

Subject	Standard Deviation	Average Difficulty Level
Chemistry	1.21	5.51
Mathematics	0.62	5.17
Physics	1.19	5.33

Chemistry: Paper 2 surprised students with high difficulty level which was 5.5. Maximum questions were distributed among difficulty levels 5, 6 and 7.

Physics: Paper 2 was of almost same difficulty level as of Paper 1.

Mathematics: Paper 2 was difficult in comparison with Paper 1 where maximum questions were distributed among difficulty level 5, 6 and 7 and the trend was almost same as of Chemistry from Paper 1 to 2.

Advanced Analysis – JEE Advanced 2017 Paper 1

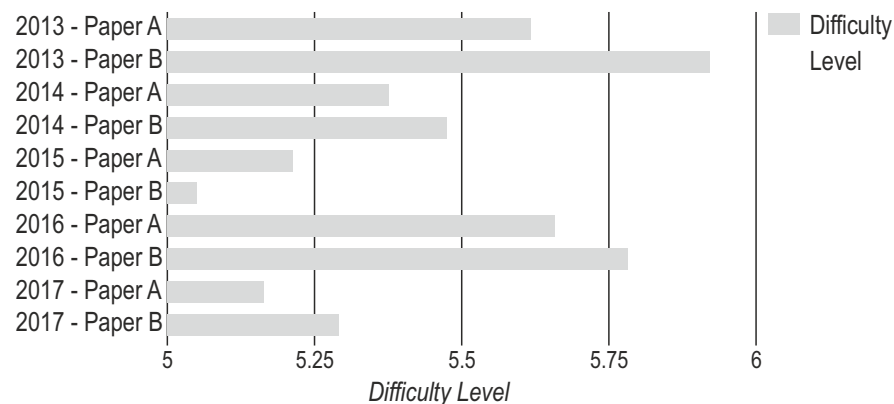
S.No	Subjects	Questions	Questions	Marks	Marks	Percentage	Percentage
		XI	XII	XI	XII	XI	XII
1	Physics	9	9	31	30	51	49
2	Chemistry	9	9	30	31	49	51
3	Math	9	9	30	31	49	51
	Total	27	27	91	92		
	Grand Total	27+27=	54	91+92=	183		

Advanced Analysis – JEE Advanced 2017 Paper 2

S.No	Subjects	Questions		Marks		Percentage	
		XI	XII	XI	XII	XI	XII
1	Physics	8	10	26	35	43	57
2	Chemistry	5	13	18	43	30	70
3	Math	5	13	16	45	26	74
	Total	18	36	60	123		
	Grand Total	18+36=	54	60+123=	183		

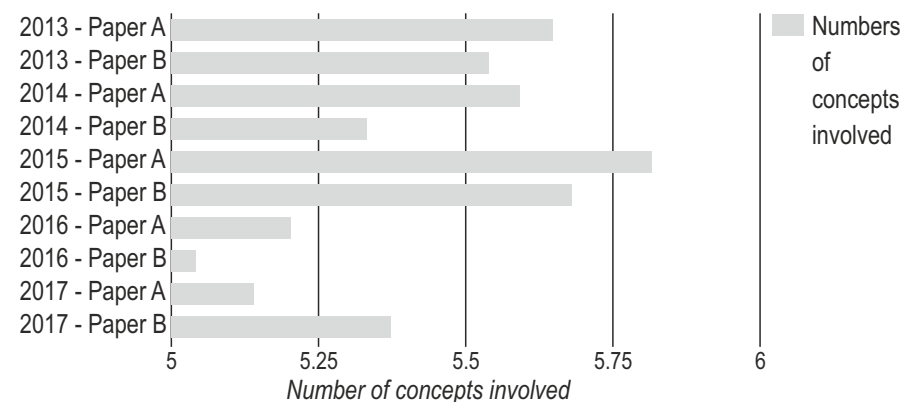
Comparative Difficulty Level Analysis of the JEE Advanced 2017 Paper with the Previous Years

JEE Advanced year wise difficulty level analysis



Number of Concepts Involved in JEE Advanced Paper (Year-wise)

JEE Advanced year wise number of concepts involved



This graph shows that the number of concepts involved in JEE Advanced 2017 paper has increased with respect to 2016 and is less than the number of concepts involved in JEE Advanced 2013, 2014 and 2015.

JEE Advanced Marks vs Ranks Trends till 2016

RANK	JEE 2010	JEE 2011	JEE 2012	JEE 2013	JEE 2014	JEE 2015	JEE 2016
10	81.39	85.42	88.48	85.83	86.94	83.92	86.02
100	70.76	79.79	78.68	76.39	77.5	69.84	68.61
500	62.17	72.08	69.36	66.67	68.61	60.32	54.57
1000	57.87	68.13	64.46	61.67	63.33	56.75	49.46
2000	52.97	62.5	58.21	55.56	57.22	49.21	43.55
3000	49.69	59.17	54.41	51.94	53.61	45.44	42.74
4000	47.03	56.67	51.72	49.17	51.11	42.66	37.9
5000	44.99	54.38	49.51	47.22	48.89	40.48	36.02
6000	43.35	52.71	47.55	45.56	47.22	38.69	34.41
7000	41.92	51.04	45.83	43.89	45.56	37.1	33.33
8000	40.49	49.79	43.38	42.5	44.44	35.91	31.99
9000	39.47	48.54	43.14	41.11	43.06	34.52	30.91
10000	38.85	47.71	41.91	40	41.94	33.33	29.84
Jee Advanced Cut off	38.85	47.71	34.55	33.88	35	23.81	20.16

JEE Advanced 2017 Cutoff (Opening and Closing Rank)

S.No.	Institute	Opening Rank	Closing Rank
1	IIT Madras	62	5319
2	IIT Bombay	1	4880
3	IIT Patna	1541	7891
4	IIT Indore	933	7732
5	IIT (BHU) Varanasi	500	9805
6	IIT Kharagpur	138	6312
7	ISM Dhanbad	1655	9530
8	IIT Delhi	24	5431
9	IIT Roorkee	294	7531
10	IIT Gandhinagar	493	6869
11	IIT Hyderabad	418	6844
12	IIT Kanpur	113	7469

S.No.	Institute	Opening Rank	Closing Rank
13	IIT Guwahati	406	8000
14	IIT Jammu	4743	6219
15	IIT Jodhpur	699	6006
16	IIT Dharwad	2914	8478
17	IIT Palakkad	2818	8648
18	IIT Tirupati	2524	8536
19	IIT Bhubaneswar	1497	8482
20	IIT Ropar	898	7372
21	IIT Mandi	1701	7124
22	IIT Goa	3003	7571
23	IIT Bhilai	3146	8379