

JEE MAIN

2018

TOPIC WISE ANALYSIS



JEE Main 2018 Paper

Conducting Body	CBSE
Exam Date	08th April, 2018
Exam Mode	Offline Test
Exam Paper and Duration	2 papers (Paper 1 and Paper 2) of 3 hours each
Subjects or Sections	Physics, Chemistry, Maths / 3 Sections
Total Marks	360 Marks
Question Type	MCQs and single correct option.
For correct Answers	+4 marks
For incorrect Answers	-1 mark

JEE Main 2018 Offline Paper: Distribution of Questions

In JEE Main 2018 Paper I the distribution of questions were as follows:

Subject	Class 11		Class 12		Total	
	No of Questions	Total Marks	No of Questions	Total Marks	No of Questions	Total Marks
Physics	13	52	17	68	30	120
Mathematics	15	60	15	60	30	120
Chemistry	14	59	16	61	30	120
Grand Total	42	171	48	189	90	360

JEE Main 2018: Expert's Viewpoint

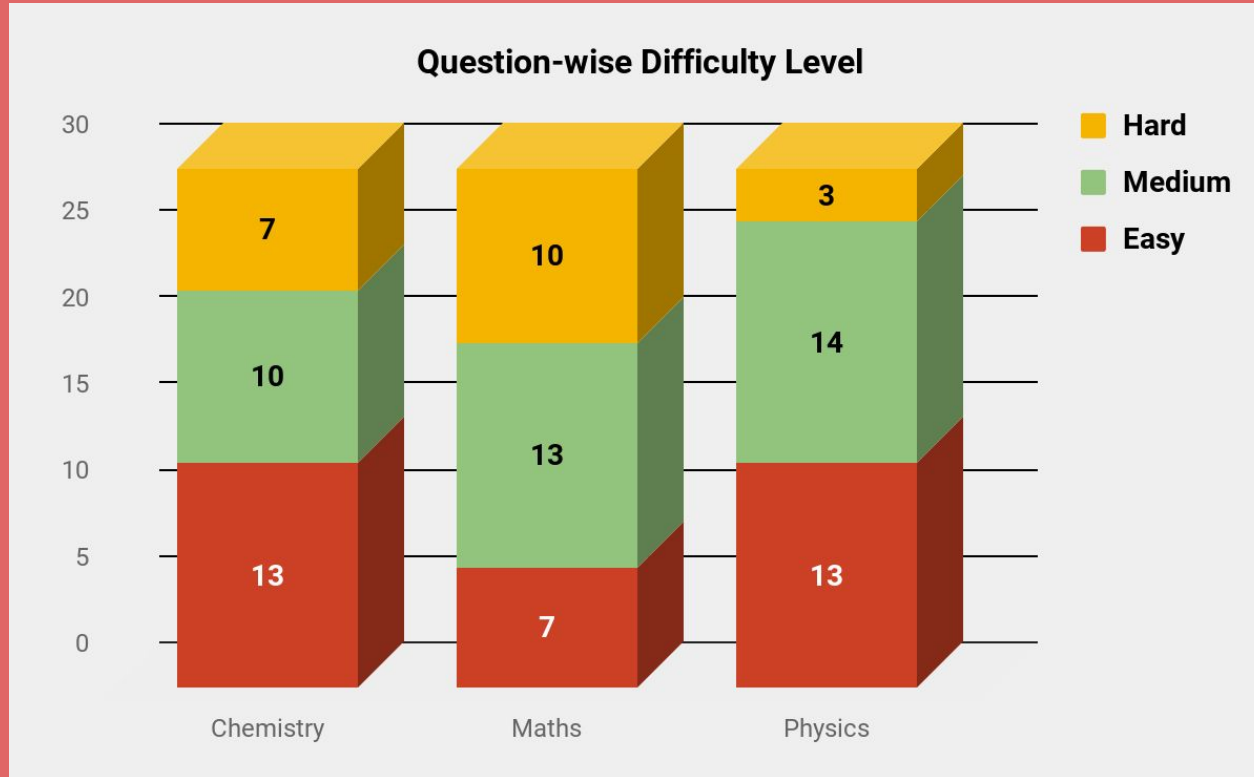
- Here is a summary of the difficulty level analysis given by experts.

Subjects	Difficulty Level
Physics	Toughest Section.
Chemistry	Moderate as more focus was on lesser important chapters.
Maths	From moderate to difficult. Majority of the questions were lengthy though.
Overall	The paper was on a moderate level.

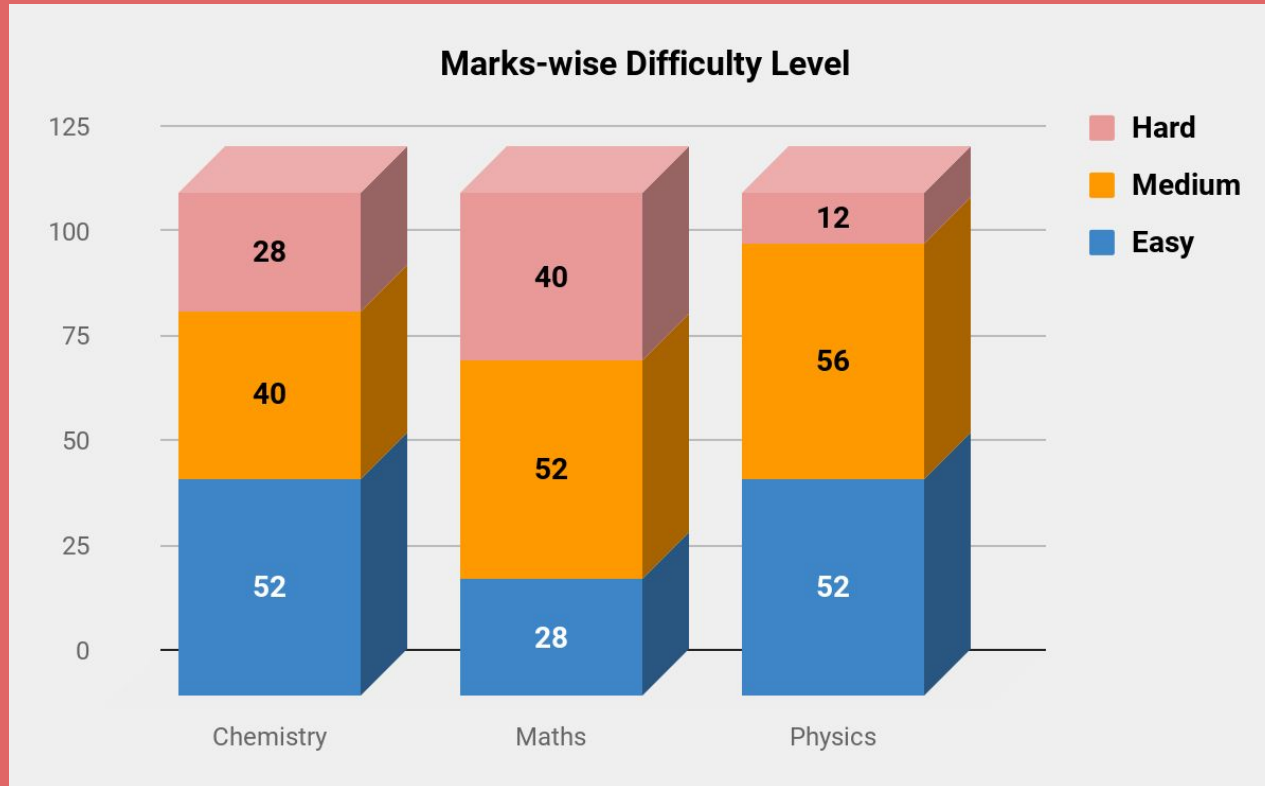
JEE Main 2018 Overall Difficulty Analysis

Subject	Easy		Moderate		Tough	
	No. of Questions	Total Marks	No. of Questions	Total Marks	No. of Questions	Total Marks
Physics	13	52	14	56	3	12
Maths	7	28	13	52	10	40
Chemistry	13	52	10	40	7	28
Grand Total	33	132	37	148	20	80

JEE Main 2018 Question-wise Difficulty Level



JEE Main 2018 Marks-wise Difficulty Level



JEE Main 2018 Paper Analysis: Physics

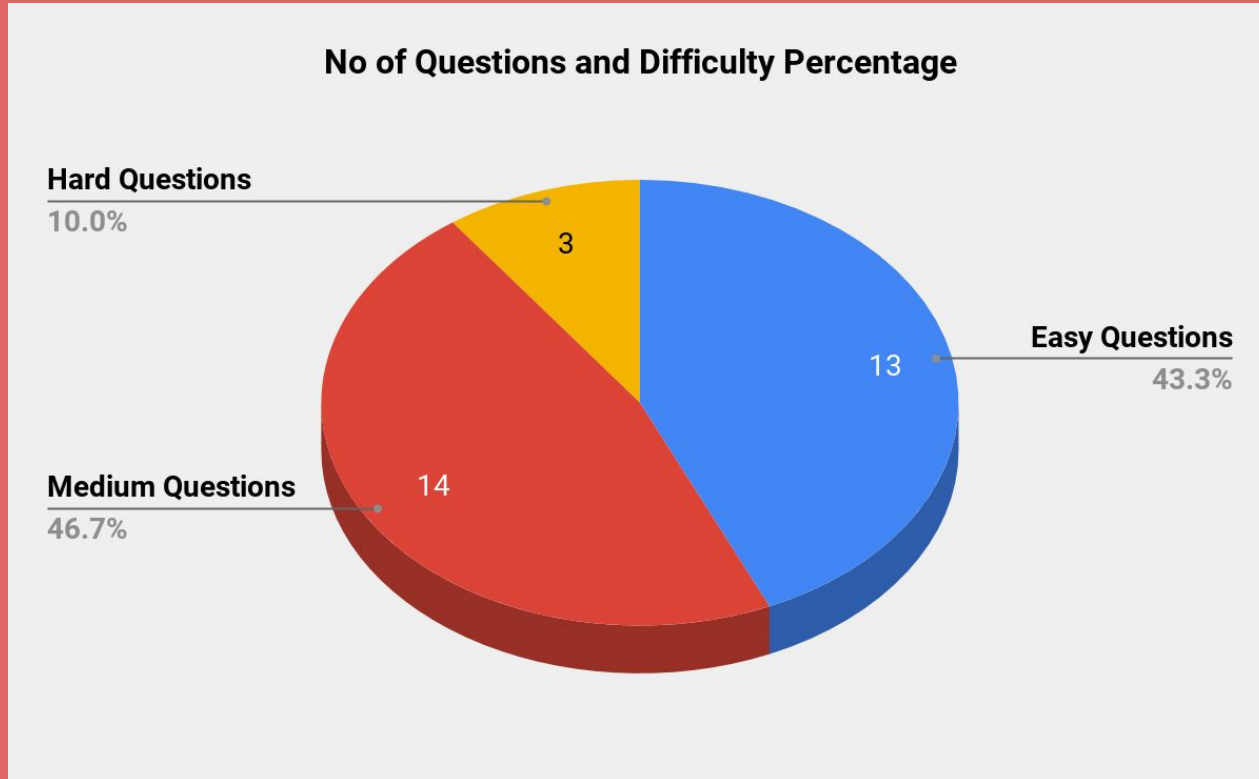
- Physics as usual was the toughest paper amongst the three.
- The questions were a mix of theory-based and calculative.
- However, surprisingly this section was not that lengthy.
- Questions were set from Capacitors, Dual Nature of Matter and Radiation, Electromagnetic Waves, Electrostatics, Kinematics, Measurement and Errors, Electromagnetic Induction, Electronic Devices, Magnetic Effect of Current.

Subject	Class 11		Class 12		Total	
	No. of Questions	Total Marks	No. of Questions	Total Marks	Total Questions	Total Marks
Physics	13	52	17	68	30	120

Topic wise Question Breakup in Physics		
Topics	No of Questions	Weightage of Marks
Electrodynamics	9	30.00%
Capacitance	1	3.33%
Current Electricity	3	10.00%
Electromagnetic Field	2	6.67%
Alternating Current	2	6.67%
Electrostatics	1	3.33%
Heat & Thermodynamics	2	6.67%
KTG & Thermodynamics	2	6.67%
Mechanics	10	33.33%
Circular Motion	1	3.33%
Elasticity & Viscosity	2	6.67%
Error in Measurement	1	3.33%
Rigid Body Dynamics	2	6.67%

Topic wise Question Breakup in Physics		
Topics	No of Questions	Weightage of Marks
Rectilinear Motion & Vectors	1	3.33%
Modern Physics	6	20.00%
Nuclear Physics	1	3.33%
Atomic Physics	2	6.67%
Semiconductors	1	3.33%
Electromagnetic waves & communication	2	6.67%
Optics	2	6.67%
Wave Optics	2	6.67%
SHM & Waves	1	3.33%
SHM	1	3.33%

JEE Main 2018 Paper Analysis: Physics Section



JEE Main 2018 Paper Analysis: Chemistry

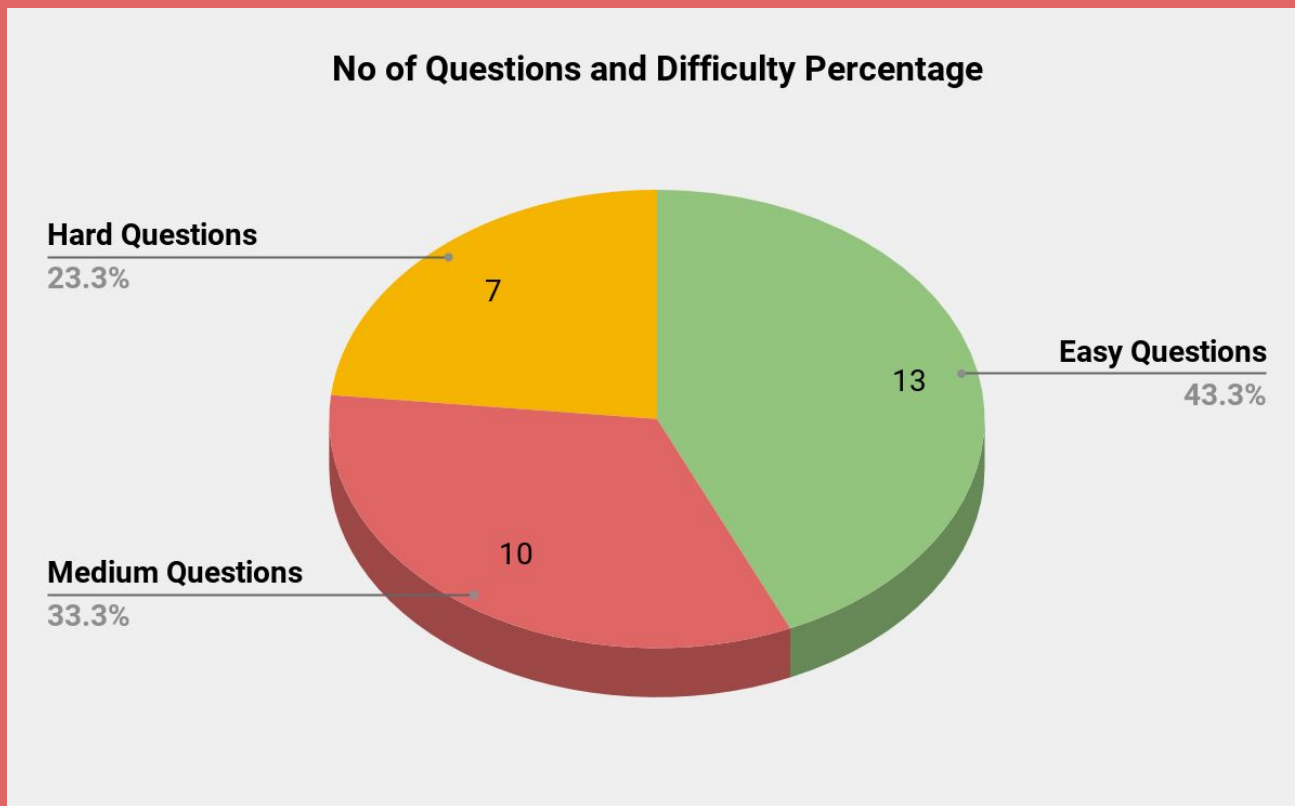
- Chemistry was moderately easy amongst the three.
- The questions were a mix of theory and calculations.
- This section consisted of questions that were from lesser important chapters but almost equal weightage of Physical, Organic and Inorganic Chemistry was there.
- Questions were set mainly from Alcohols, Chemical Bonding, Biomolecules, Phenols and Ethers, Chemical Thermodynamics, Chemistry in Everyday Life, etc.

Subject	Class 11		Class 12		Total	
	No. of Questions	Total Marks	No. of Questions	Total Marks	Total Questions	Total Marks
Chemistry	14	59	16	61	30	120

Topic wise Question Breakup in Chemistry		
Topics	No of Questions	Weightage of Marks
Inorganic Chemistry-I	6	20.00%
Chemical Bonding	4	13.33%
p-block	2	6.67%
Inorganic Chemistry-II	3	10.00%
Coordination Compounds	2	6.67%
Metallurgy	1	3.33%
Organic Chemistry-I	2	6.67%
General Organic Chemistry- II	2	6.67%
Organic Chemistry-II	8	26.67%
Alkyl Halide, Alcohol & Ether (Reaction Mechanism)	2	6.67%
Aromatic Compounds	2	6.67%
Biomolecules	1	3.33%
Grignard Reagent, Reduction, Oxidation & Hydrolysis	1	3.33%

Topic wise Question Breakup in Chemistry		
Topics	No of Questions	Weightage of Marks
Practical Organic Chemistry	1	3.33%
Environmental chemistry	1	3.33%
Physical Chemistry-I	7	23.33%
Chemical Equilibrium	1	3.33%
Gaseous State	1	3.33%
Ionic Equilibrium	4	13.33%
Thermodynamics and Thermochemistry	1	3.33%
Physical Chemistry-II	4	13.33%
Chemical Kinetics	1	3.33%
Electrochemistry	1	3.33%
Solid State	1	3.33%
Solution & Colligative Properties	1	3.33%

JEE Main 2018 Paper Analysis: Chemistry Section



JEE Main 2018 Paper Analysis: Maths Section

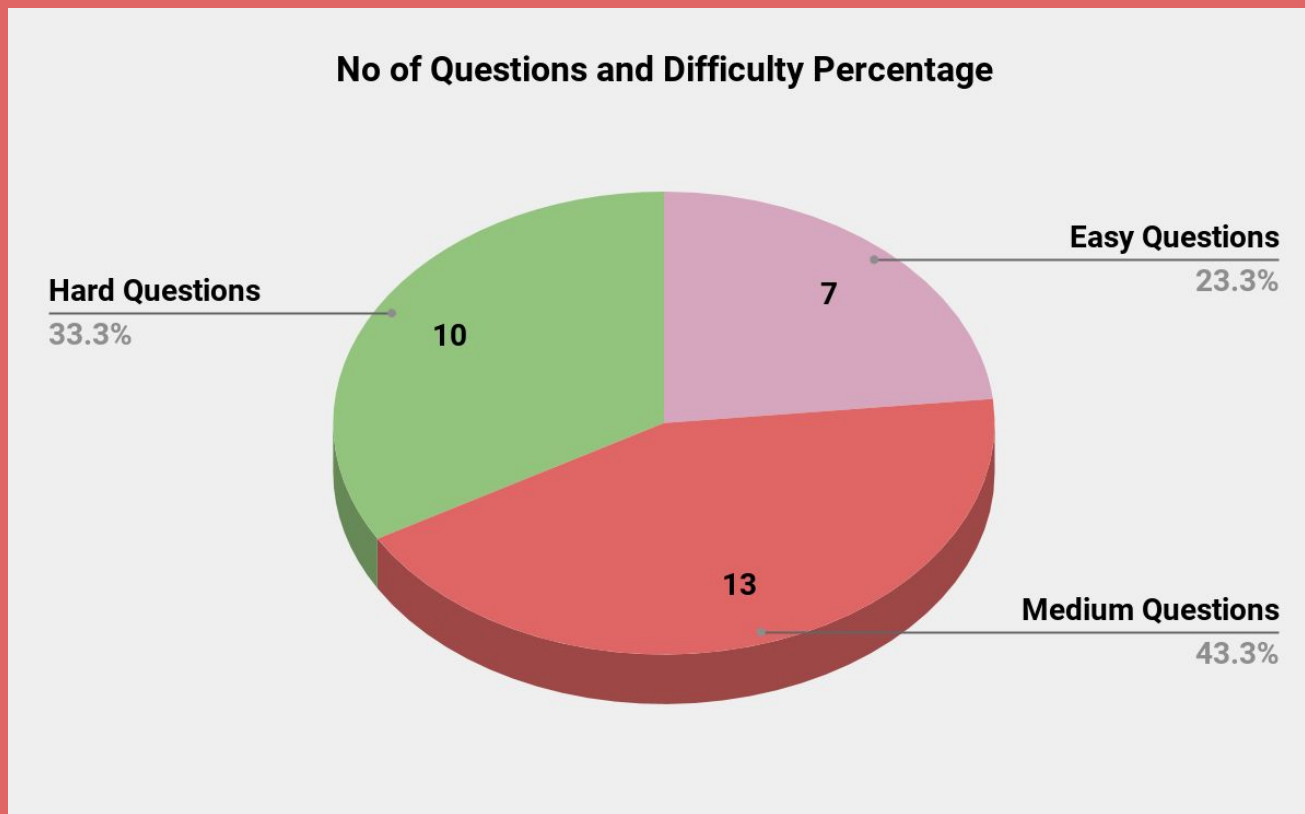
- The mathematics section in paper 1 was basically on a moderate level.
- Attempting all the questions seemed to be a hard task as the questions were lengthy.
- Questions were asked from topics such as Differential Equations, 3D Geometry, Application of Integration, Matrices, Inverse trigonometry, Statistics, Quadratic Equations, Trigonometry, Sequences, and Series, Permutations and Combinations

Subject	Class 11		Class 12		Total	
	No. of Questions	Total Marks	No. of Questions	Total Marks	Total Questions	Total Marks
Maths	15	60	15	60	30	120

Topic wise Question Breakup in Maths		
Topics	No of Questions	Weightage of Marks
Binomial Theorem	1	3.33%
Binomial Theorem	1	3.33%
Complex Numbers	1	3.33%
Complex Numbers	1	3.33%
Coordinate Geometry	5	16.67%
Circle	1	3.33%
Parabola	2	6.67%
Hyperbola	1	3.33%
Straight Line	1	3.33%
Differential Calculus	5	16.67%
Limit, Continuity & Differentiability	2	6.67%
Maxima & Minima	1	3.33%
Sets & Relation	1	3.33%
Application of Derivatives	1	3.33%
Fundamentals of Mathematics	1	3.33%
Statistics	1	3.33%

Topic wise Question Breakup in Maths		
Topics	No of Questions	Weightage of Marks
Integral Calculus	4	13.33%
Definite integration	2	6.67%
Differential equation	1	3.33%
Indefinite integration	1	3.33%
Matrix & Determinants	2	6.67%
Matrices & Determinants	2	6.67%
Permutation & Combination	1	3.33%
Permutation & Combination	1	3.33%
Probability	1	3.33%
Sequence & Series	2	6.67%
Trigonometry	2	6.67%
Trigonometric equation	1	3.33%
Trigonometric Ratio & identities	1	3.33%
Vector and 3D	3	10.00%
Co-ordinate Geometry (3-D)	2	6.67%
Vector	1	3.33%
Mathematical Reasoning	1	3.33%

JEE Main 2018 Paper Analysis: Maths Section



Important Topics Asked in JEE Main 2018 Paper: Physics

- ❑ Mechanics
- ❑ Electrodynamics
- ❑ Thermodynamics and Kinetic Theory
- ❑ Optics and Wave Optics
- ❑ Modern Physics and Nuclear Physics
- ❑ Magnetic Effect of Current
- ❑ Electronic Devices
- ❑ Capacitors
- ❑ Dual Nature of Matter and Radiation
- ❑ Electromagnetic Waves
- ❑ Electrostatics
- ❑ Kinematics
- ❑ Measurement and Errors Electromagnetic Induction

Chemistry

- ❑ Alcohols
- ❑ Chemical Bonding
- ❑ Biomolecules
- ❑ Phenols and Ethers
- ❑ Chemical Thermodynamics
- ❑ Chemistry in Everyday Life
- ❑ Coordination Compounds
- ❑ Hydrocarbons
- ❑ Electrochemistry
- ❑ P-block Elements
- ❑ Solid State Solutions
- ❑ Purification and Characteristics of Organic Compounds

Maths

- ❑ Hyperbola
- ❑ Parabola
- ❑ Sets
- ❑ Relations and Functions
- ❑ Mathematical Induction and Reasoning
- ❑ Parabola
- ❑ Permutations and Combinations
- ❑ Quadratic Equations
- ❑ Sequences and Series
- ❑ Statistics
- ❑ Trigonometry
- ❑ 3D Geometry
- ❑ Determinants
- ❑ Differential Equations

JEE Main 2018 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
Common Rank List	111275	350	74

Thank You!

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