

JEE MAIN

2017

TOPIC WISE ANALYSIS



JEE Main 2017 Paper

Conducting Body	CBSE
Exam Date	2nd April, 2017
Exam Mode	Offline Test (Pen and Paper Based)
Exam Paper and Duration	2 papers (Paper 1 and Paper 2) of 3 hours each
Subjects or Sections	Physics, Chemistry, Maths / 3 Sections
No. of Questions	30 from each section. Total 90 questions
Marks	120 marks per section. Total 360 Marks
Question Type	MCQs and single correct option.
For correct Answers	+4 marks
For incorrect Answers	1/4 marks of total marks per question

JEE Main 2017 Offline Paper: Distribution of Questions

The distribution of questions in JEE Main 2017 Paper I 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	13	60	17	60	30	120
Chemistry	12	48	18	72	30	120
Grand Total	38	160	35	200	90	360

JEE Main 2017: Expert's Viewpoint

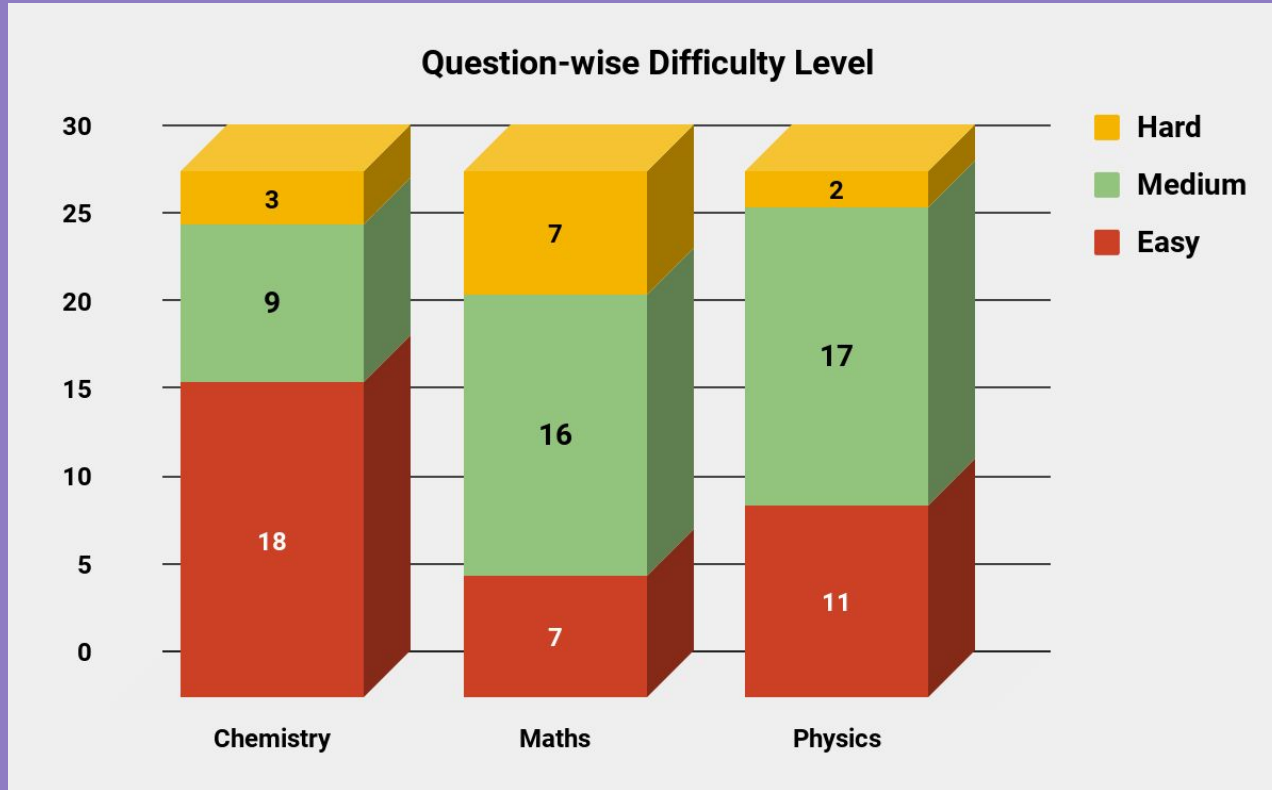
- As per the experts the overall difficulty level of paper I is as follows:

Subjects	Difficulty Level
Physics	Was on a moderate level.
Chemistry	Easy and scoring.
Maths	Relatively tougher than other sections.
Overall	Overall difficulty level for paper was between easy to moderate.

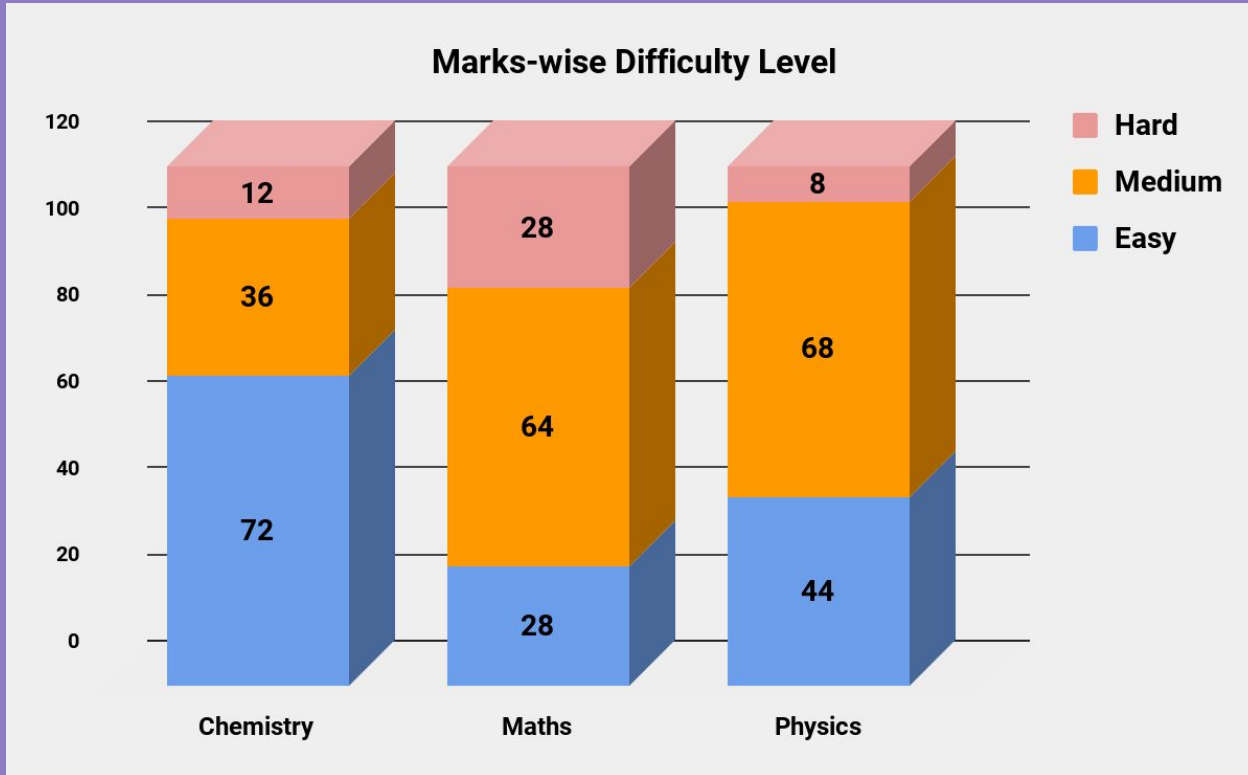
JEE Main 2017 Overall Difficulty Analysis

Subject	Easy		Moderate		Tough	
	No. of Questions	Total Marks	No. of Questions	Total Marks	No. of Questions	Total Marks
Physics	11	44	17	68	2	8
Maths	7	28	16	64	7	28
Chemistry	18	72	9	36	3	12
Grand Total	36	144	42	168	12	48

JEE Main 2017 Question-wise Difficulty Level



JEE Main 2017 Marks-wise Difficulty Level



JEE Main 2017 Paper I Analysis: Physics

- Physics section consisted of questions that were on a moderate level.
- Questions were a mix of theory-based and calculations.
- However, Physics was relatively easier but lengthier compared to 2016.
- Some important topics like Mechanical Waves and Sound and Uniform Circular Motion were left out this time.

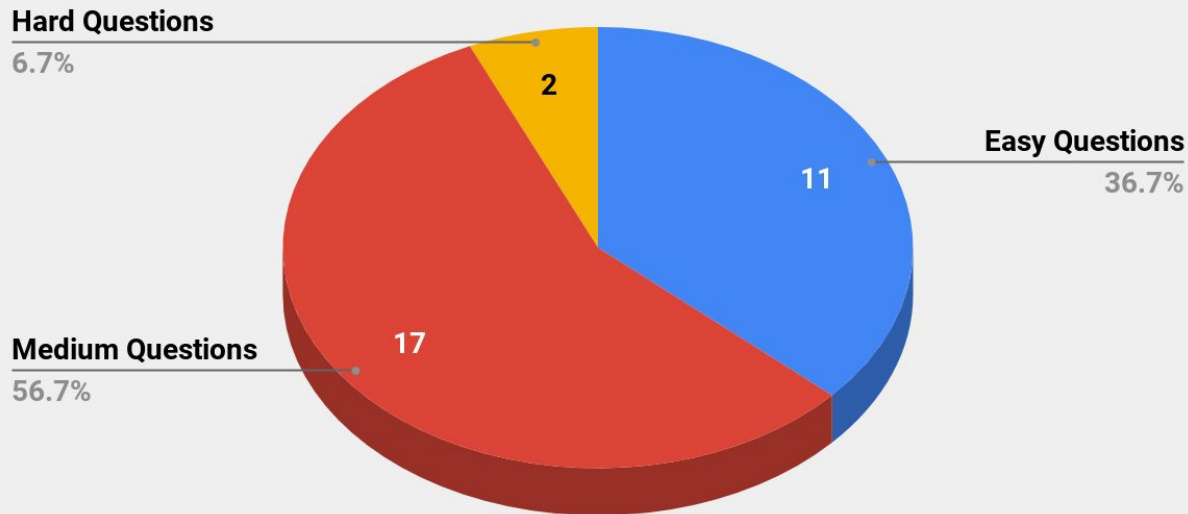
Subject	Class 11		Class 12		Total	
	No. of Questions	Total Marks	No. of Questions	Total Marks	Total Questions	Total Marks
Physics	13	52	17	68	30	120

Topic wise Question Breakup in Physics		
Topics	No of Questions	Weightage of Marks
Electrodynamics	8	26.67%
Capacitance	2	6.67%
Current Electricity	3	10.00%
Electro Magnetic Field	1	3.33%
Electro Magnetic Induction	1	3.33%
Electrostatics	1	3.33%
Heat & Thermodynamics	4	13.33%
Calorimetry & Thermal Expansion	2	6.67%
KTG & Thermodynamics	2	6.67%
Mechanics	8	26.67%
Elasticity & Viscosity	1	3.33%
Gravitation	1	3.33%
Rectilinear Motion & Vectors	1	3.33%

Topic wise Question Breakup in Physics		
Topics	No of Questions	Weightage of Marks
Rigid Body Dynamics	2	6.67%
Surface Tension	1	3.33%
Work, Power & Energy	2	6.67%
Modern Physics	5	16.67%
Modern Physics	3	10.00%
Nuclear Physics	1	3.33%
Semiconductors	1	3.33%
Optics	2	6.67%
Geometrical Optics & Physical Optics	1	3.33%
Wave Optics	1	3.33%
SHM & Waves	3	10.00%
Principle of Communication	1	3.33%
SHM	1	3.33%
Sound Waves	1	3.33%

JEE Main 2017 Paper Analysis: Physics Section

No of Questions and Difficulty Percentage



JEE Main 2017 Paper I Analysis: Chemistry

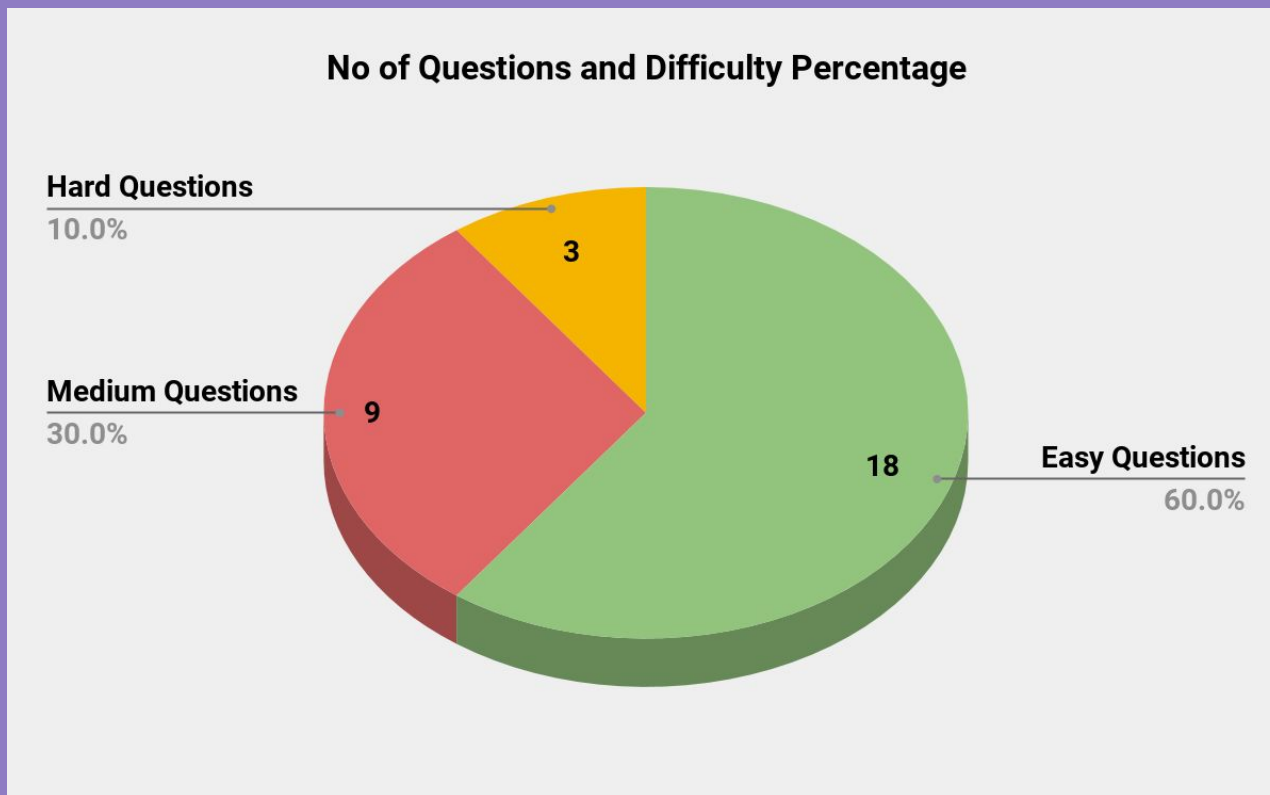
- Chemistry was as usual the easiest section amongst the three.
- The questions were straight forward and few easy calculations were also included.
- Questions from Physical & Inorganic Chemistry were similar to that of the previous year paper.
- Organic Chemistry seemed to have some difficult questions that were of logical type.
- Topics covered as per the NCERT syllabus.

Subject	Class 11		Class 12		Total	
	No. of Questions	Total Marks	No. of Questions	Total Marks	Total Questions	Total Marks
Chemistry	12	48	18	72	30	120

Topic wise Question Breakup in Chemistry		
Topics	No of Questions	Weightage of Marks
Inorganic Chemistry-I	5	16.67%
Chemical Bonding	2	6.67%
Periodic Table & Periodicity in Properties	1	3.33%
S-Block	2	6.67%
Inorganic Chemistry-II	2	6.67%
Coordination Compounds	1	3.33%
Qualitative Analysis	1	3.33%
Organic Chemistry-I	1	3.33%
General Organic Chemistry-I	1	3.33%
Organic Chemistry-II	10	33.33%
Alkyl Halide, Alcohol & Ether (Reaction Mechanism)	4	13.33%
Aromatic Compounds	1	3.33%
Biomolecules	1	3.33%

Topic wise Question Breakup in Chemistry		
Topics	No of Questions	Weightage of Marks
Carbonyl Compounds	1	3.33%
Environmental chemistry	1	3.33%
Grignard Reagent, Reduction, Oxidation & Hydrolysis	1	3.33%
Physical Chemistry-I	7	23.33%
Atomic Structure & Nuclear Chemistry	1	3.33%
Ionic Equilibrium	1	3.33%
Mole Concept	3	10.00%
Thermodynamics and Thermochemistry	2	6.67%
Physical Chemistry-II	5	16.67%
Chemical Kinetics	1	3.33%
Electrochemistry	1	3.33%
Solid State	1	3.33%
Solution & Colligative Properties	1	3.33%
Surface Chemistry	1	3.33%

JEE Main 2017 Paper Analysis: Chemistry Section



JEE Main 2017 Paper I Analysis: Maths Section

- The mathematics section consisted of questions on a moderate level.
- The questions involved lengthy calculations and took more time to solve compared to the other sections.
- In Mathematics, Set-D Q 28 seemed to be a bit controversial.
- Comparatively, Mathematics was tougher than 2016..

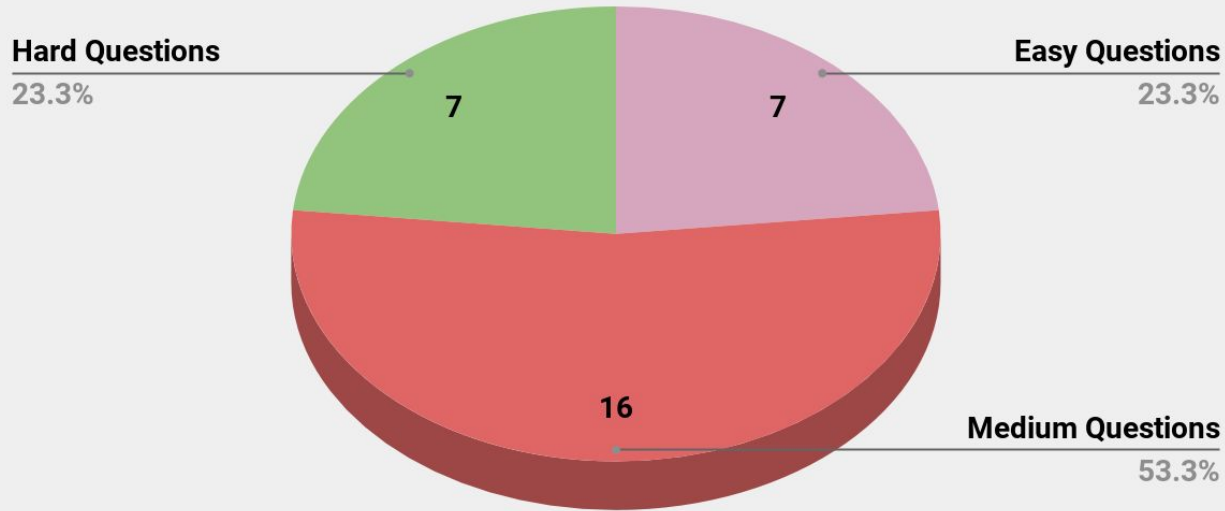
Subject	Class 11		Class 12		Total	
	No. of Questions	Total Marks	No. of Questions	Total Marks	Total Questions	Total Marks
Maths	13	60	17	60	30	120

Topic wise Question Breakup in Maths		
Topics	No of Questions	Weightage of Marks
Algebra	1	3.33%
Vector	1	3.33%
Binomial Theorem	1	3.33%
Complex Numbers	1	3.33%
Coordinate Geometry	3	10.00%
Ellipse	1	3.33%
Hyperbola	1	3.33%
Straight Line	1	3.33%
Co-ordinate Geometry (3-D)	2	6.67%
Differential Calculus	7	23.33%
Application of Derivatives	2	6.67%
Functions	2	6.67%
Limit, Continuity & Differentiability	1	3.33%
Methods of Differentiation	1	3.33%
Tangent & Normal	1	3.33%

Topic wise Question Breakup in Maths		
Topics	No of Questions	Weightage of Marks
Integral Calculus	4	13.33%
Area under Curve	1	3.33%
Definite Integration	1	3.33%
Differential Equation	1	3.33%
Indefinite Integration	1	3.33%
Mathematical Reasoning	1	3.33%
Matrix & Determinants	2	6.67%
Permutation & Combination	1	3.33%
Probability	2	6.67%
Quadratic Equation	1	3.33%
Sequence & Series	1	3.33%
Statistics	1	3.33%
Trigonometric equation	1	3.33%
Trigonometric Ratio & identities	1	3.33%

JEE Main 2017 Paper Analysis: Maths Section

No of Questions and Difficulty Percentage



Important Topics Asked in JEE Main 2017 Paper: Physics

- ❑ Gravitation, Rotational Mechanics
- ❑ Properties of Matter
- ❑ SHM, Oscillations
- ❑ Mechanical Waves and Sound
- ❑ Ray Optics, Wave Optics
- ❑ Heat and Thermodynamics
- ❑ Electrostatics
- ❑ Current Electricity
- ❑ Magnetism, Magnetic effects of current
- ❑ EMI , AC and EM waves and Communication

Chemistry

- ❑ Atomic Structure and Classification
- ❑ Chemical Bonding
- ❑ Stoichiometry
- ❑ Chemical & Ionic Equilibrium
- ❑ Chemical Kinetics & Nuclear Chemistry
- ❑ Alkyl Halide, Alcohol & Ether (Reaction Mechanism)
- ❑ Electrochemistry
- ❑ General Organic Chemistry + Functional Group
- ❑ Coordination Compounds & Organometallics
- ❑ Surface Chemistry
- ❑ Chemical Thermodynamics

Maths

- ❑ Limits, Continuity & Differentiability
- ❑ Application of Derivatives
- ❑ Conics
- ❑ Quadratic Equations, Inequalities, Progressions
- ❑ Probability
- ❑ Indefinite and Definite Integrals & Area under the Curve
- ❑ Indefinite and Definite Integrals & Area under the Curve
- ❑ 3D Coordinate Geometry
- ❑ Differential Equations & Properties of Triangles
- ❑ Trigonometry and Inverse Circular Function
- ❑ Heights and Distances
- ❑ Matrices & Determinants

JEE Main 2017 Cutoff

Category	Cutoff
General	81
OBC	49
SC	32
ST	27
PwD	1

Thank You!

For more information: Visit <https://byjus.com/jee-main/> or download
BYJU'S - The Learning App