

JEE (Main) 2014

A Detailed Analysis by Resonance

On 6-April-2014, JEE (Main) 2014 was conducted for students opting to take this exam by offline mode. This is the second edition of this Exams after wide ranging changes were introduced last year by CBSE and Ministry of HRD. Around 14 Lakh students are slated to appear for this exam in offline and online modes

JEE (Main) 2014 was conducted in two parts (Paper 1 and Paper 2). Paper 1 was conducted from 9 AM to 12 PM and Paper 2 for B. Arch. Aspirants was conducted from 2 PM to 5 PM.

Paper 1 was for students vying for engineering seats in Engineering colleges, while paper 2 was for students willing for B. Arch degrees

The Analysis below pertains to only Paper 1, which was for Engineering Aspirants.

OVERALL MARKS DISTRIBUTION

The paper pattern was same as last year. The paper had 90 questions each worth 4 marks. All questions were objective type with single correct option. Subject wise each subject had 30 questions of 120 marks.

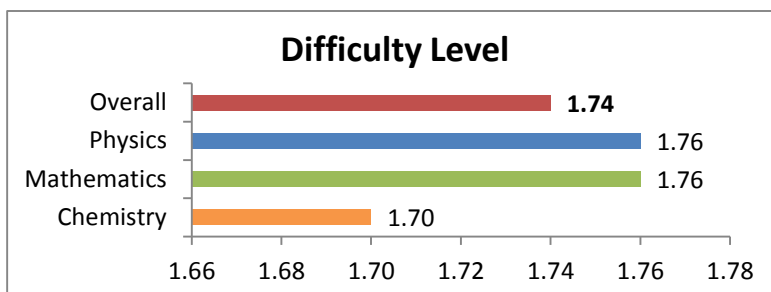
Subject	Class 11		Class 12		Total	
	No of Questions	Total Marks	No of Questions	Total Marks	No of Questions	Total Marks
Chemistry	11	44	19	76	30	120
Mathematics	15	60	15	60	30	120
Physics	15	60	15	60	30	120
Grand Total	41	164	49	196	90	360

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	1.70
Mathematics	1.76
Physics	1.76
Overall Average	1.74



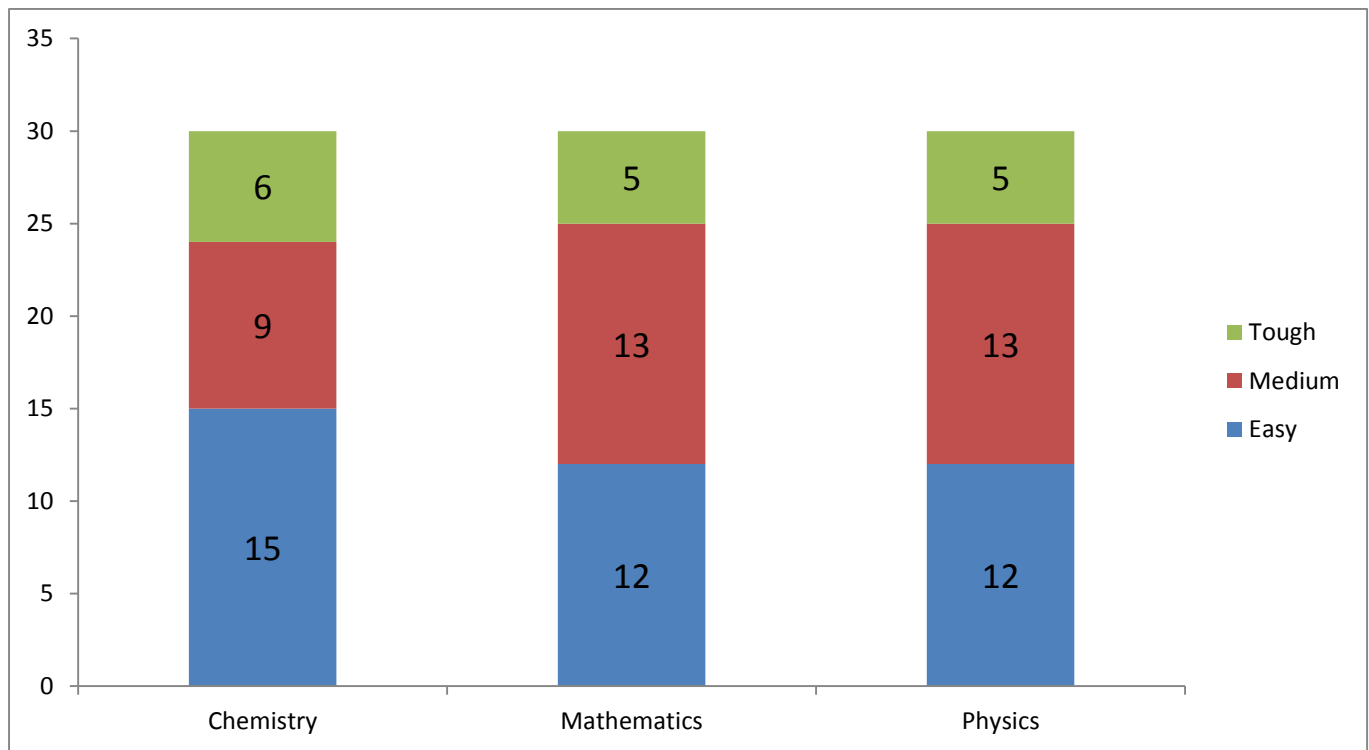
Difficulty Level Analysis: No of Questions

Subject	Easy Level		Medium Level		Difficult Level	
	No of Questions	Total Marks	No of Questions	Total Marks	No of Questions	Total Marks
Chemistry	15	60	9	36	6	24
Mathematics	12	48	13	52	5	20
Physics	12	76	13	24	5	20
Grand Total	39	156	35	140	16	64

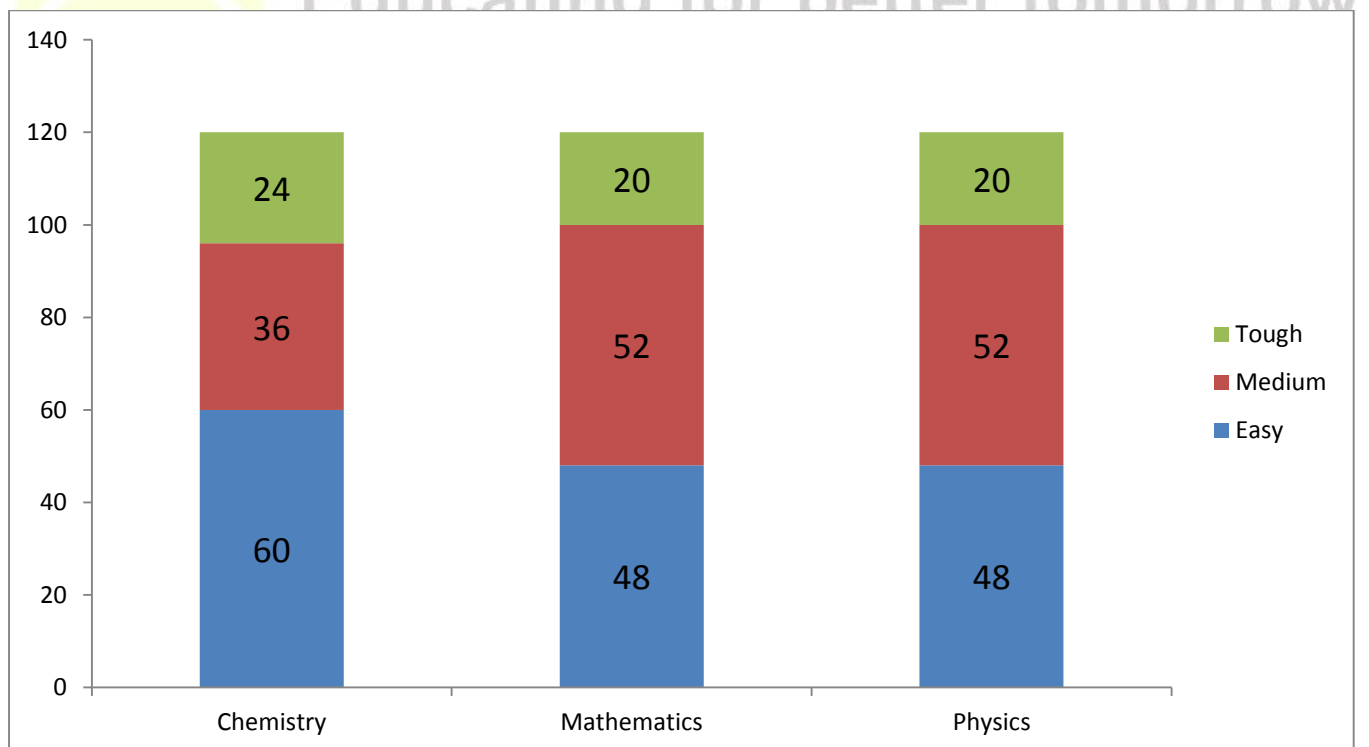
Resonance Experts feel that all subjects were of similar difficulty level, while Chemistry was on easier side compared with Physics & Mathematics. While around 156 Marks can be considered easy overall, 140 marks are relatively difficulty and 64 marks are considered difficult by Resonance Team.

Overall, it is felt that while paper is moderately difficulty, the cut-off may remain same as last year, since the number of aspirants have gone up and competition is intense because this exam is gateway to JEE (Advanced)

Question Wise Difficulty Breakup



Mark Wise Difficulty Breakup



PHYSICS ANALYSIS
Topic wise Allocation of Marks

Unit & Topic Name	No of Questions	Total Marks	% Weightage
Electrodynamics	6	24	20%
Capacitance	1	4	3%
Current & Electricity	1	4	3%
Electro Magnetic Field & Force	2	8	7%
Electro Magnetic Induction	1	4	3%
Electrostatics	1	4	3%
Heat & Thermodynamics	3	12	10%
Heat Transfer	1	4	3%
KTG & Thermodynamics	2	8	7%
Mechanics	11	44	37%
Error in Measurement	2	8	7%
Fluid Mechanics	1	4	3%
Friction	1	4	3%
Gravitation	1	4	3%
Projectile Motion	1	4	3%
Properties of Matter	2	8	6%
Rigid Body Dynamics	2	8	7%
Work, Power & Energy	1	4	3%
Modern Physics	5	20	17%
Electromagnetic waves & communication	2	8	7%
Modern Physics	2	8	7%
Semiconductors	1	4	3%
Optics	3	12	10%
Geometrical Optics & Physical Optics	2	8	7%
Wave Optics	1	4	3%
SHM & Waves	2	8	7%
Simple Harmonic Motion	1	4	3%
Sound Waves	1	4	3%
Grand Total	30	120	100%

CHEMISTRY ANALYSIS
Topic wise Allocation of Marks

Unit & Topic Name	No of Questions	Total Marks	% Weightage
Inorganic Chemistry	8	32	27%
Chemical Bonding	2	8	7%
d-block & f-block	2	8	7%
p-block	1	4	3%
Reaction Mechanics	2	8	7%
Transition Elements & Coordination Chemistry	1	4	3%
Organic Chemistry	8	32	27%
Aromatic Compound	1	4	3%
Carbohydrates, Amino Acids and Polymers	3	12	10%
General Organic Chemistry	1	4	3%
Hydrocarbons	1	4	3%
Oxidation & Reduction	1	4	3%
Practical Organic Chemistry	1	4	3%
Physical Chemistry	14	56	47%
Atomic Structure	1	4	3%
Chemical Equilibrium	1	4	3%
Chemical Kinetics	1	4	3%
Electrochemistry	4	16	13%
Equivalent Concept & Titration	1	4	3%
Gaseous State	1	4	3%
Mole Concept	2	8	7%
Solid State	1	4	3%
Solution & Colligative Properties	1	4	3%
Thermodynamics & Thermochemistry	1	4	3%
Grand Total	30	120	100%

MATHEMATICS ANALYSIS

Topic wise Allocation of Marks

Unit & Topic Name	No of Questions	Total Marks	% Weightage
Binomial Theorem	1	4	3.3%
Complex Numbers	1	4	3.3%
Coordinate Geometry	5	20	16.7%
Circle	1	4	3.3%
Ellipse	1	4	3.3%
Parabola	1	4	3.3%
Straight Line	2	8	6.7%
Co-ordinate Geometry (3-D)	2	8	6.7%
Differential Calculus	5	20	16.7%
Application of Derivatives	2	8	6.7%
Functions	1	4	3.3%
Limit of function	1	4	3.3%
Sets & Relation	1	4	3.3%
Integral Calculus	4	16	13.3%
Area under curve	1	4	3.3%
Differential equation	1	4	3.3%
Indefinite integration	2	8	6.7%
Mathematical Reasoning	1	4	3.3%
Matrix & Determinants	2	8	6.7%
Probability	1	4	3.3%
Quadratic Equation	2	8	6.7%
Sequence & Series	2	8	6.7%
Statistics	1	4	3.3%
Trigonometry	2	8	6.7%
Height & Distance	1	4	3.3%
Trigonometric equation	1	4	3.3%
Vector	1	4	3.3%
Grand Total	30	120	100.0%

EXPECTED CUTOFF

JEE (Main) 2014: Tentative# Cutoff Table for JEE (Advanced) 2014				
Category	% Reservation	Total Seats	Cut-off Marks*	% Cutoff
Open	50.5%	75750	113	31.4%
OBC	27.0%	40500	70	19.4%
SC	15.0%	22500	50	13.9%
ST	7.5%	11250	45	12.5%
Total	100.0%	150000		
JEE (Main) 2014: Maximum Marks				360
* For Qualification in JEE (Advanced) if student is also in Top-20 % of his Board in Class 12				
# The Cut-off of JEE (Main) 2014 for JEE (Advanced) 2014 is estimated on the basis of Previous Year Data and Toughness Analysis of JEE (Main) 2014 Paper by Resonance Experts. These are not official data released by Authorities concerned.				

