

JEE Main (January Attempt) 2020

(Memory Based)

7th Jan, 1st Shift (9:30 am – 12:30 pm)

A Detailed Analysis by Resonance

This is the second year that JEE Main exam is being conducted entirely in the computer-based mode and also the first time that JEE Main is being conducted by National Testing Agency (NTA).

More than 11.18 Lakh students are stated to register for the January Attempt of JEE Main 2020 Exam. A total of 9,21,261 candidates have registered for B.Tech or B.E (earlier called Paper I) and 1,38,409 have registered for B.Arch examination (which was earlier referred to as Paper II). This year, a Planning paper was also conducted and 59,003 students have registered for the examination.

On Jan 6th, B. Arch/B. Planning was conducted. From 7th Jan to 9th Jan, Engg. (B.E./B.Tech.) paper will be conducted in two shifts: First Shift – 9:30AM to 12:30PM & Second Shift – 2:30PM to 5:30PM daily.

This year NTA result will consist of four NTA Scores, for each of the three subjects (Mathematics, Physics, Chemistry) and the total in Paper-1 of JEE (Main)–2020 for the January attempt. These NTA scores will be calculated in terms of “**Normalization procedure based on Percentile Score**”.

The analysis below pertains to only Paper catering engineering aspirants.

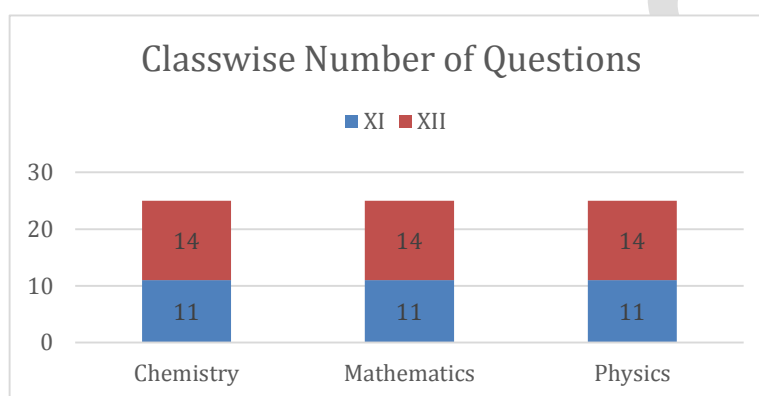
OVERALL MARKS DISTRIBUTION

The paper pattern was new compare to last Year. The paper had 75 questions each worth 4 marks. 25 questions was there in each PCM Subject. 20 questions of multiple choice type & 5 questions answers to be filled as numerical value. Subject wise each subject had 25 questions of 100 marks in total.

For each incorrect response, 1 mark was deducted from the total score. There was no negative marking for numerical value answer type of questions.

Although, it is memory based Resonance experts could figure out all the questions and answers, i.e. 75.

Subject	Class 11		Class 12		Total Percentage	
	No of Questions	Total Marks	No of Questions	Total Marks	Class 11	Class 12
Chemistry	11	44	14	56	44%	56%
Mathematics	11	44	14	56	44%	56%
Physics	11	44	14	56	44%	56%
Grand Total	33	132	42	168	44.00%	56.00%

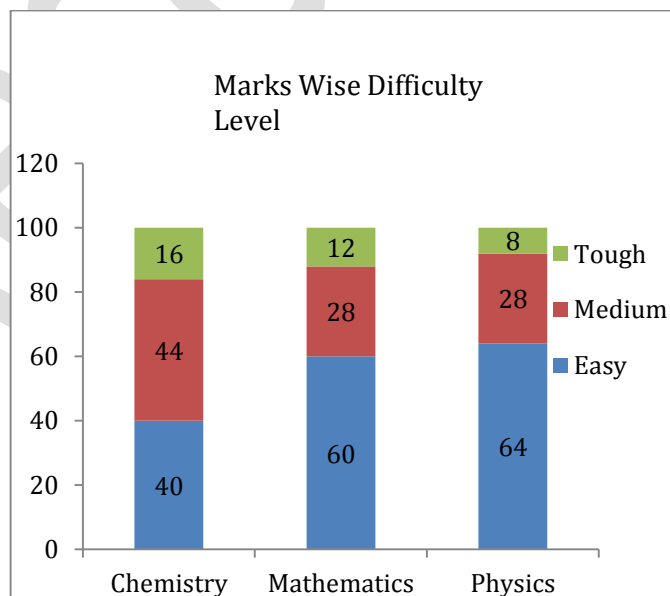
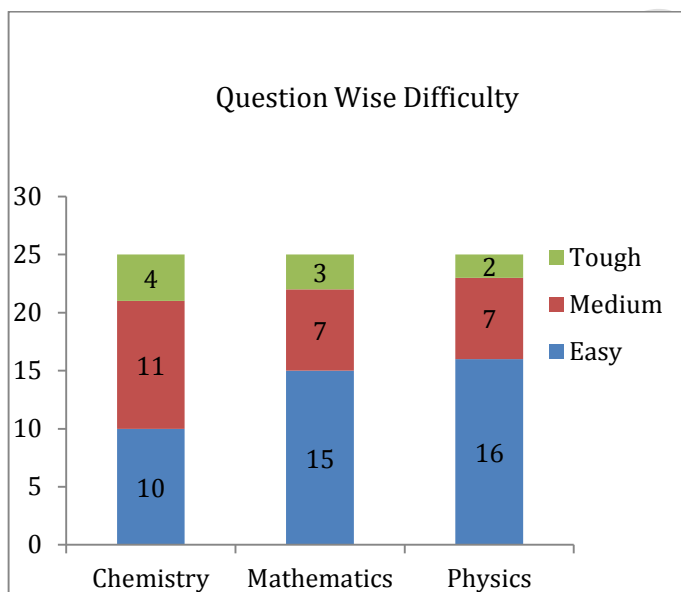


SUBJECT-WISE DIFFICULTY LEVEL ANALYSIS: NO OF QUESTIONS

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	10	40	11	44	4	16
Mathematics	15	60	7	28	3	12
Physics	16	64	7	28	2	8
Grand Total	41	164	25	100	9	36



Resonance experts feel that Chemistry and Mathematics paper was on tougher side as compared to Physics. Out of 300 marks, **152** marks paper can be considered of easy level, **112** marks can be considered of medium difficulty level and **36** marks can be considered to be of difficult level by Resonance Team.

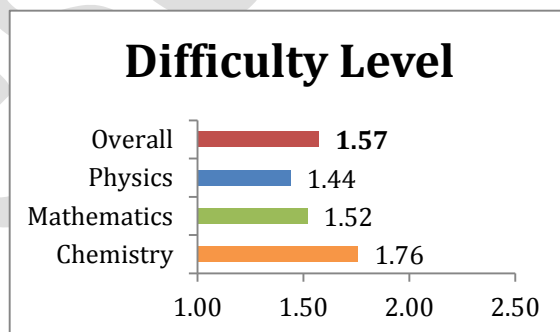
Overall, difficulty level of paper seemed to be moderate.

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	1.76
Mathematics	1.52
Physics	1.44
Overall	1.57



PHYSICS ANALYSIS

PHYSICS			
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
Physics	25	100	100.00%
Electrodynamics	7	28	28.00%
Capacitance	1	4	4.00%
Current Electricity	1	4	4.00%
Alternating Current	1	4	4.00%
Electrostatics	1	4	4.00%
Electro Magnetic Induction	3	12	12.00%
Heat & Thermodynamics	4	16	16.00%
KTG & Thermodynamics	3	12	12.00%
Calorimetry & Thermal Expansion	1	4	4.00%
Mechanics	6	24	24.00%
Rigid Body Dynamics	2	8	8.00%
Work, Power & Energy	2	8	8.00%
Centre of Mass	1	4	4.00%
Gravitation	1	4	4.00%
Modern Physics	4	16	16.00%
Atomic Physics	2	8	8.00%
Semiconductors	1	4	4.00%
Electromagnetic waves & communication	1	4	4.00%
Optics	3	12	12.00%
Wave Optics	2	8	8.00%
Geometrical Optics & Physical Optics	1	4	4.00%
SHM & Waves	1	4	4.00%
String Wave	1	4	4.00%

CHEMISTRY ANALYSIS

CHEMISTRY			
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
Chemistry	25	100	100.00%
Inorganic Chemistry-I	5	20	20.00%
Chemical Bonding	2	8	8.00%
p-block	1	4	4.00%
Periodic Table & Periodicity in Properties	2	8	8.00%
Inorganic Chemistry-II	3	12	12.00%
Coordination Compounds	2	8	8.00%
Metallurgy	1	4	4.00%
Organic Chemistry-I	1	4	4.00%
General Organic Chemistry- II	1	4	4.00%
Organic Chemistry-II	6	24	24.00%
Alkyl Halide, Alcohol & Ether (Reaction Mechanism)	1	4	4.00%
Aromatic Compounds	1	4	4.00%
Biomolecules	1	4	4.00%
Grignard Reagent, Reduction, Oxidation & Hydrolysis	1	4	4.00%
Practical Organic Chemistry	1	4	4.00%
Chemistry in Everyday life	1	4	4.00%
Physical Chemistry-I	6	24	24.00%
Ionic Equilibrium	1	4	4.00%
Thermodynamics and Thermochemistry	1	4	4.00%
Mole Concept	2	8	8.00%
Atomic Structure & Nuclear Chemistry	1	4	4.00%
Equivalent Concept	1	4	4.00%
Physical Chemistry-II	3	12	12.00%
Chemical Kinetics	1	4	4.00%
Electrochemistry	1	4	4.00%
Solution & Colligative Properties	1	4	4.00%
Organic Chemistry-1	1	4	4.00%
Hydrocarbon	1	4	4.00%

MATHEMATICS ANALYSIS

UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
Maths	25	100	100.00%
Binomial Theorem	1	4	4.00%
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Complex Numbers	1	4	4.00%
Complex Numbers	1	4	4.00%
Coordinate Geometry	1	4	4.00%
Straight Line	1	4	4.00%
Differential Calculus	6	24	24.00%
Limit, Continuity & Differentiability	2	8	8.00%
Application of Derivatives	1	4	4.00%
Functions	1	4	4.00%
Methods of Differentiation	2	8	8.00%
Integral Calculus	3	12	12.00%
Definite integration	2	8	8.00%
Differential equation	1	4	4.00%
Matrix & Determinants	2	8	8.00%
Matrices & Determinants	2	8	8.00%
Permutation & Combination	1	4	4.00%
Permutation & Combination	1	4	4.00%
Probability	1	4	4.00%
Probability	1	4	4.00%
Sequence & Series	2	8	8.00%
Sequence & Series	2	8	8.00%
Trigonometry	1	4	4.00%
Trigonometric Ratio & identities	1	4	4.00%
Vector and 3D	4	16	16.00%
Co-ordinate Geometry (3-D)	2	8	8.00%
Vector	2	8	8.00%
Mathematical Reasoning	1	4	4.00%
Mathematical Reasoning	1	4	4.00%
Statistics	1	4	4.00%
Statistics	1	4	4.00%