

## Paper Analysis - JEE (Main) 2019

On 10 -Jan-2019, JEE Main was conducted for those students who opted to take this exam via the online mode (Shift - 2). Around 8 Lac students were selected to appear for this exam in online mode. These exams were conducted in two parts - Paper 1 and Paper 2.

Here is the analysis of Paper 1, which was conducted for the engineering aspirants.

### Overall Marks Distribution

The paper pattern of JEE Main Paper 1 was the same as that of the previous year. This paper had 90 questions in all, each worth 4 marks, along with a negative marking of -1 for every attempted incorrect answer. All questions were of objective type with one correct option. If we talk subject wise, then each subject had 30 questions of 120 marks.

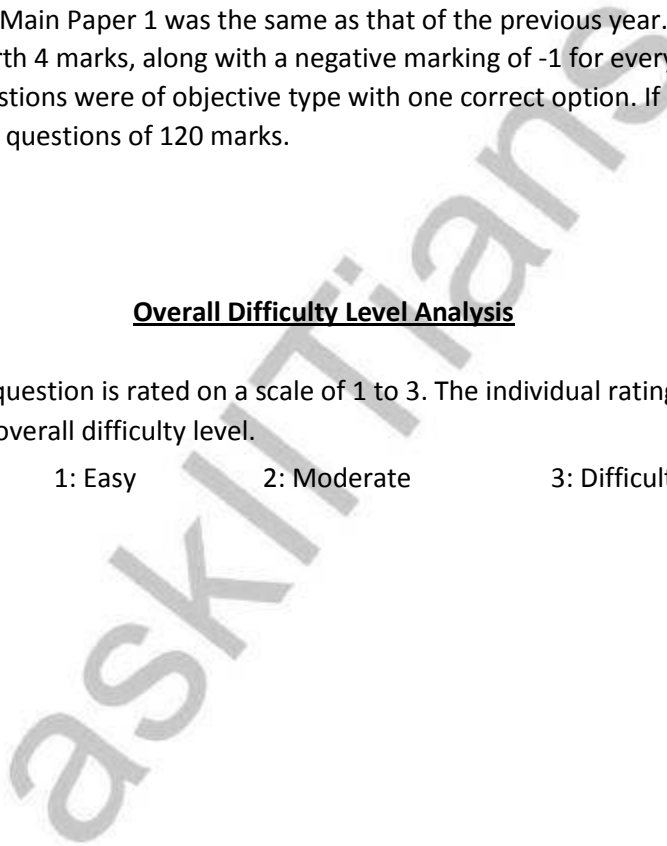
### Overall Difficulty Level Analysis

In this analysis, every question is rated on a scale of 1 to 3. The individual ratings are then averaged to calculate overall difficulty level.

1: Easy

2: Moderate

3: Difficult



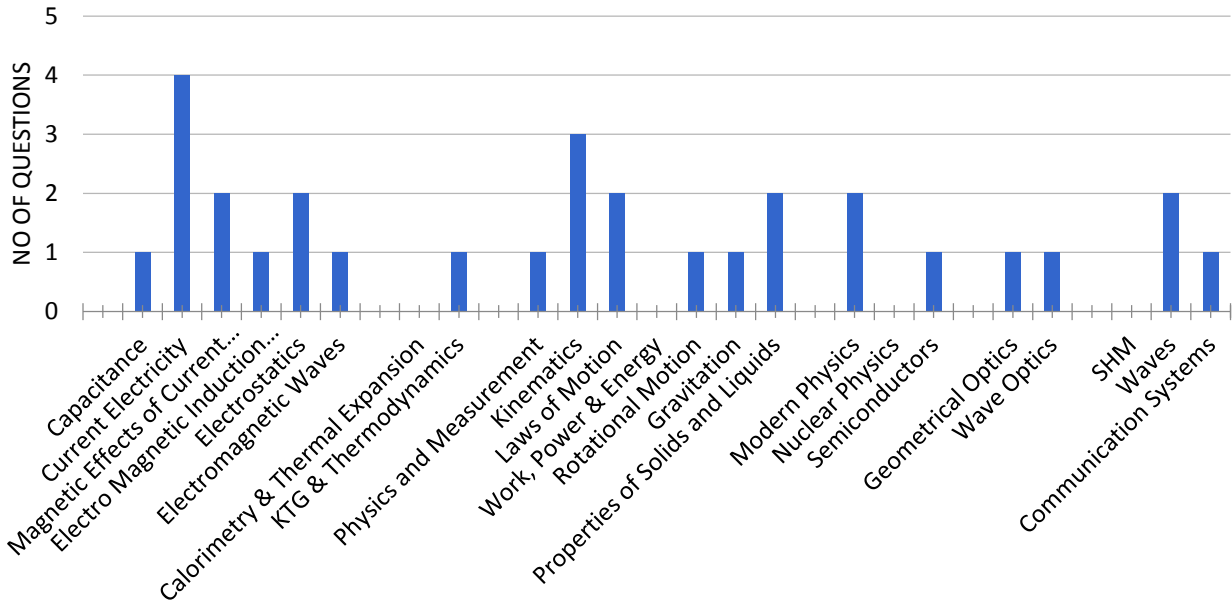
## Subject-Wise Analysis

### A – Physics

Topic wise allocation of # of Questions & Marks

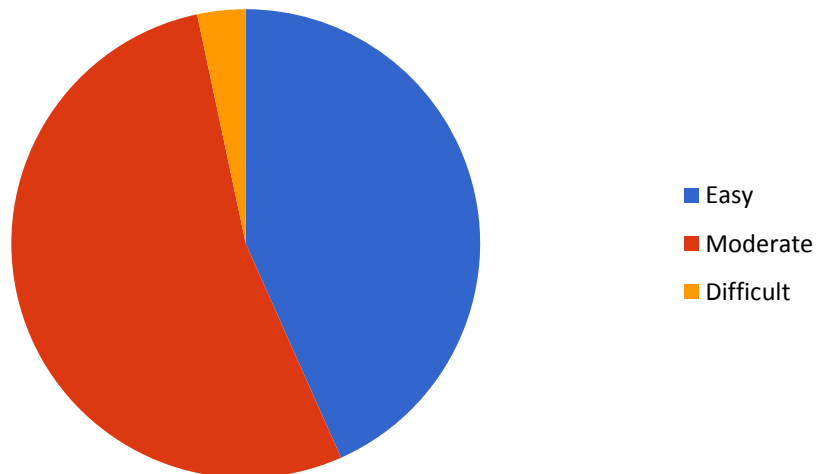
Physics			
CHAPTER	NO OF QUESTIONS	TOTAL MARKS	% WEIGHTAGE
Capacitance	1	4	3.33%
Current Electricity	4	16	13.33%
Magnetic Effects of Current and Magnetism	2	8	6.67%
Electro Magnetic Induction and Alternating Current	1	4	3.33%
Electrostatics	2	8	6.67%
Electromagnetic Waves	1	4	3.33%
Calorimetry & Thermal Expansion		0	0.00%
KTG & Thermodynamics	1	4	3.33%
Physics and Measurement	1	4	3.33%
Kinematics	3	12	10.00%
Laws of Motion	2	8	6.67%
Work, Power & Energy	0	0	0.00%
Rotational Motion	1	4	3.33%
Gravitation	1	4	3.33%
Properties of Solids and Liquids	2	8	6.67%
Modern Physics	2	8	6.67%
Nuclear Physics	0	0	0.00%
Semiconductors	1	4	3.33%
Geometrical Optics	1	4	3.33%
Wave Optics	1	4	3.33%
SHM	0	0	0.00%
Waves	2	8	6.67%
Communication Systems	1	4	3.33%
<b>Grand Total</b>	<b>30</b>	<b>120</b>	<b>100.00%</b>

### NO OF QUESTIONS vs. CHAPTER



Difficulty Level	Number of Questions
Easy	13
Moderate	16
Difficult	1

### Number of Questions

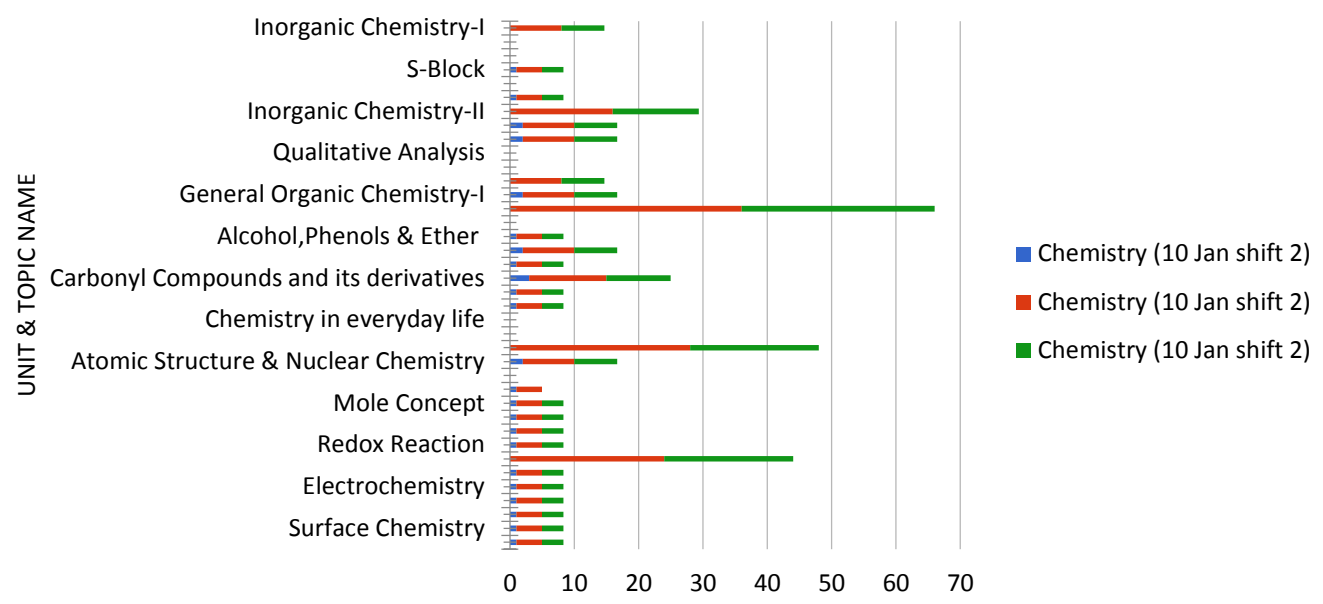


## B – Chemistry

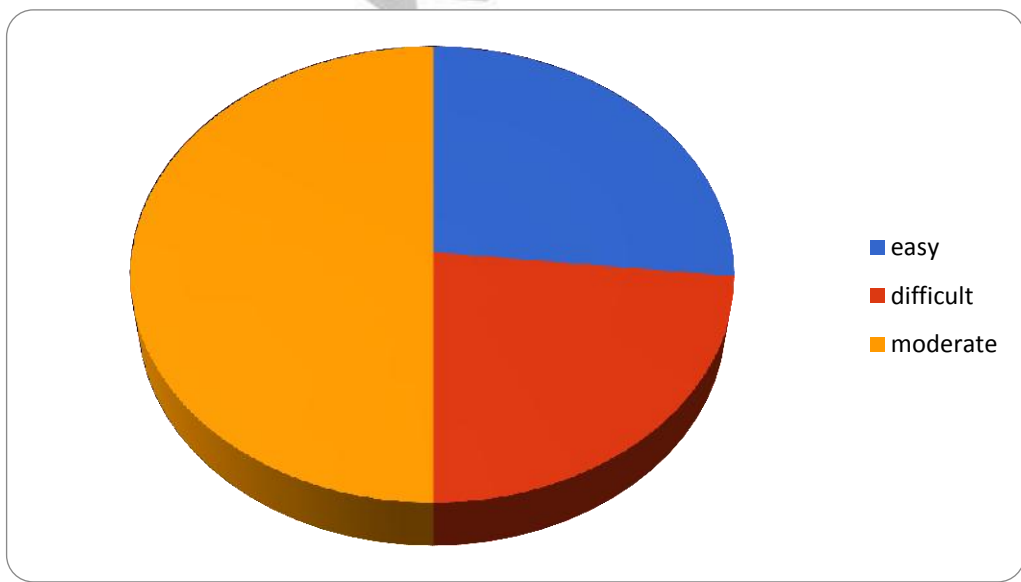
### Topic wise allocation of # of Questions & Marks

Chemistry			
UNIT & TOPIC NAME	NO OF QUESTION	TOTAL MARKS	% WEIGHTAGE
<b>Inorganic Chemistry-I</b>	<b>2</b>	<b>8</b>	<b>6.67%</b>
Chemical Bonding	0	0	0%
Periodic Table & Periodicity in Properties	0	0	0%
S-Block	1	4	3.33%
Hydrogen	0	0	0%
p block-I	1	4	3.33%
<b>Inorganic Chemistry-II</b>	<b>4</b>	<b>16</b>	<b>13.33%</b>
Coordination Compounds	2	8	6.67%
p block -II	2	8	6.67%
Qualitative Analysis	0	0	0%
D and F block	0	0	0%
<b>Organic Chemistry-I</b>	<b>2</b>	<b>8</b>	<b>6.67%</b>
General Organic Chemistry-I	2	8	6.67%
<b>Organic Chemistry-II</b>	<b>9</b>	<b>36</b>	<b>30%</b>
Alkyl and Aryl Halide	0	0	0%
Alcohol, Phenols & Ether	1	4	3.33%
Biomolecules	2	8	6.67%
Polymers	1	4	3.33%
Carbonyl Compounds and its derivatives	3	12	10%
Environmental chemistry	1	4	3.33%
Grignard Reagent, Reduction, Oxidation & Hydrolysis	1	4	3.33%
Chemistry in everyday life	0	0	0%
Amines	0	0	0%
<b>Physical Chemistry-I</b>	<b>7</b>	<b>28</b>	<b>23.33%</b>
Atomic Structure & Nuclear Chemistry	2	8	6.67%
Ionic Equilibrium	0	0	0%
Chemical Equilibrium	1	4	3.33%
Mole Concept	1	4	3.33%
Thermodynamics and Thermochemistry	1	4	3.33%
States of matter	1	4	3.33%
Redox Reaction	1	4	3.33%
<b>Physical Chemistry-II</b>	<b>6</b>	<b>24</b>	<b>20%</b>
Chemical Kinetics	1	4	3.33%
Electrochemistry	1	4	3.33%
Solid State	1	4	3.33%
Solution & Colligative Properties	1	4	3.33%
Surface Chemistry	1	4	3.33%
General Isolation of metals	1	4	3.33%
<b>Grand Total</b>	<b>30</b>	<b>120</b>	<b>100%</b>

### TOTAL MARKS and WEIGHTAGE



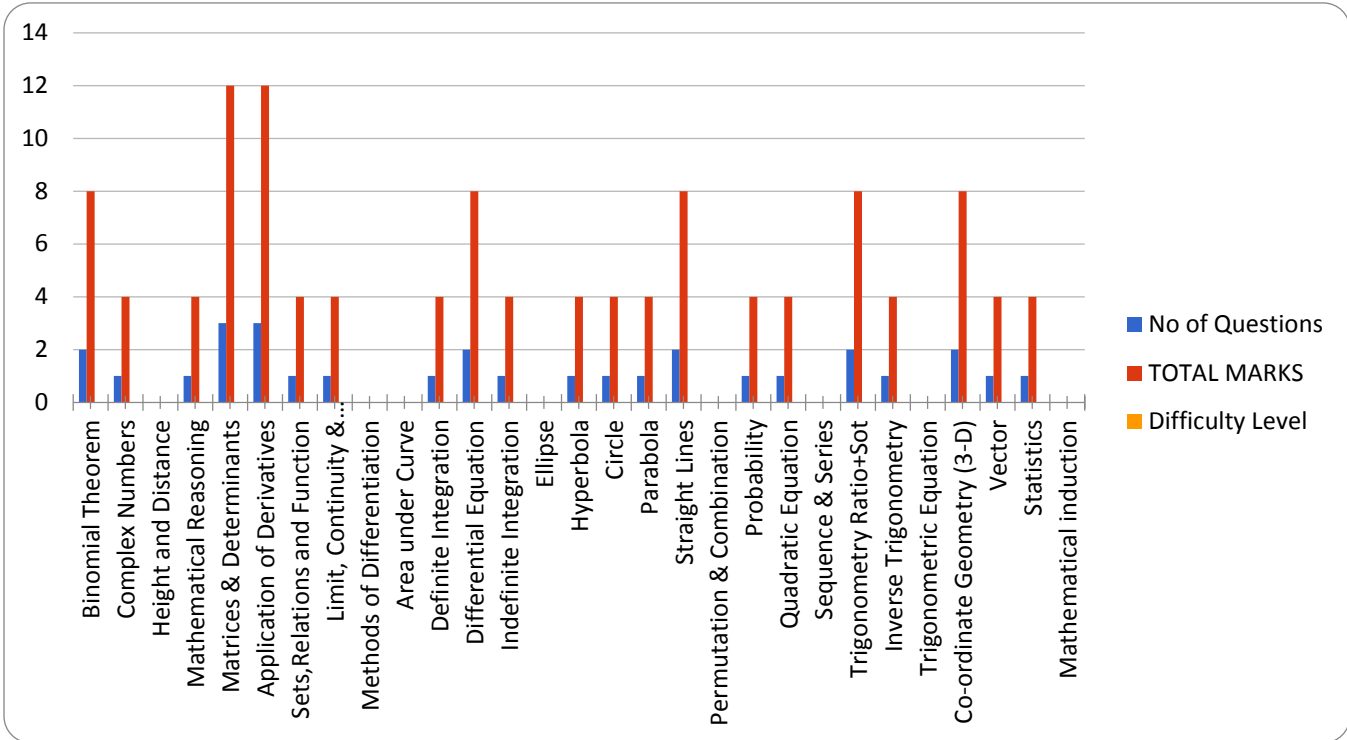
	No of question (difficulty wise)	% Difficulty
<b>Easy</b>	8	26.66666667
<b>Difficult</b>	7	23.33333333
<b>Moderate</b>	15	50



## C – Mathematics

### Topic wise allocation of # of Questions & Marks

Mathematics			
UNIT & TOPIC NAME	No of Questions	TOTAL MARKS	% Weightage
<b>Binomial Theorem</b>	<b>2</b>	<b>8</b>	<b>6.67%</b>
Complex Numbers	1	4	3.33%
Height and Distance	0	0	0%
Mathematical Reasoning	1	4	3.33%
<b>Matrices &amp; Determinants</b>	<b>3</b>	<b>12</b>	<b>10%</b>
<b>Differential Calculus</b>	<b>5</b>	<b>20</b>	<b>16.67%</b>
<b>Application of Derivatives</b>	<b>3</b>	<b>12</b>	<b>10%</b>
<b>Sets, Relations and Function</b>	<b>1</b>	<b>4</b>	<b>3.33%</b>
Limit, Continuity & Differentiability	1	4	3.33%
Methods of Differentiation	0	0	0%
<b>Integral Calculus</b>	<b>4</b>	<b>16</b>	<b>13.33%</b>
Area under Curve	0	0	0%
Definite Integration	1	4	3.33%
Differential Equation	2	8	6.67%
Indefinite Integration	1	4	3.33%
<b>Coordinate Geometry (2-D)</b>	<b>5</b>	<b>20</b>	<b>16.67%</b>
Ellipse	0	0	0%
Hyperbola	1	4	3.33%
Circle	1	4	3.33%
Parabola	1	4	3.33%
Straight Lines	2	8	6.67%
Permutation & Combination	0	0	0%
<b>Probability</b>	<b>1</b>	<b>4</b>	<b>3.33%</b>
Quadratic Equation	1	4	3.33%
Sequence & Series	0	0	0%
<b>Trigonometry</b>	<b>3</b>	<b>12</b>	<b>10%</b>
Trigonometry Ratio + Sot	2	8	6.67%
Inverse Trigonometry	1	4	3.33%
Trigonometric Equation	0	0	0%
<b>3-D and Vectors</b>	<b>3</b>	<b>12</b>	<b>10%</b>
Co-ordinate Geometry (3-D)	2	8	6.67%
Vector	1	4	3.33%
<b>Statistics</b>	<b>1</b>	<b>4</b>	<b>3.33%</b>
Mathematical induction	0	0	0%
<b>Grand Total</b>	<b>30</b>	<b>120</b>	<b>100%</b>



<b>Easy</b>	<b>16</b>
<b>Moderate</b>	<b>14</b>
<b>Difficult</b>	<b>0</b>

