

JEE Main Sep 2020

3rd Sep 2020, Shift 1

ANALYSIS of Memory-Based Questions

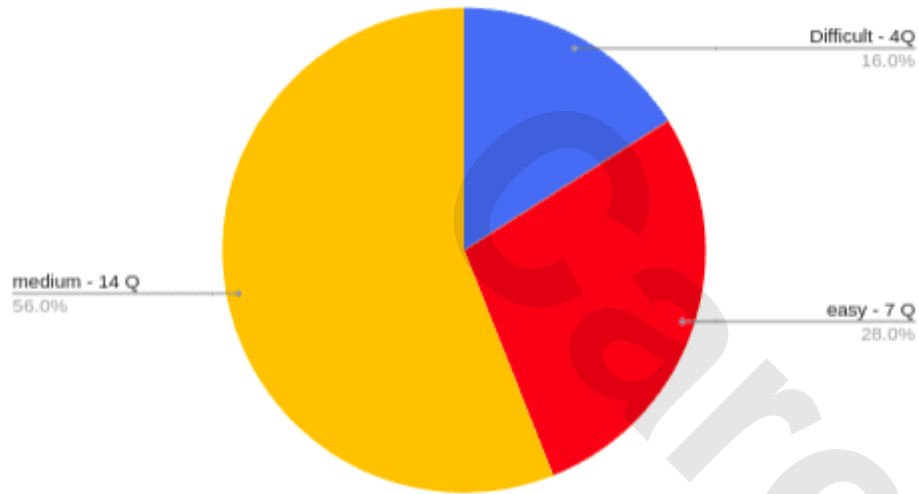
by Careers360

JEE Main 3rd September 2020 shift 1 exam was conducted across India from 9 am to 12 pm. The student's reaction reveals that the paper was moderate. The JEE Main 2020 Paper is for 360 marks with a total of 75 questions. The question paper consists of questions from physics, chemistry and mathematics with equal weightage for each subject. Each subject has 20 multiple choice questions and 5 integer type questions. This paragraph is followed with an analysis of September 3, 2020, shift 1 JEE Main paper 1 questions based on the difficulty level. All three subjects are analysed using memory based questions. According to the students and the expert, the questions from chemistry and mathematics were of moderate level and that of physics was moderate to difficult. Among the three subjects, students find chemistry a bit easier. The analysis followed by this paragraph is based on the memory-based questions collected from the students.

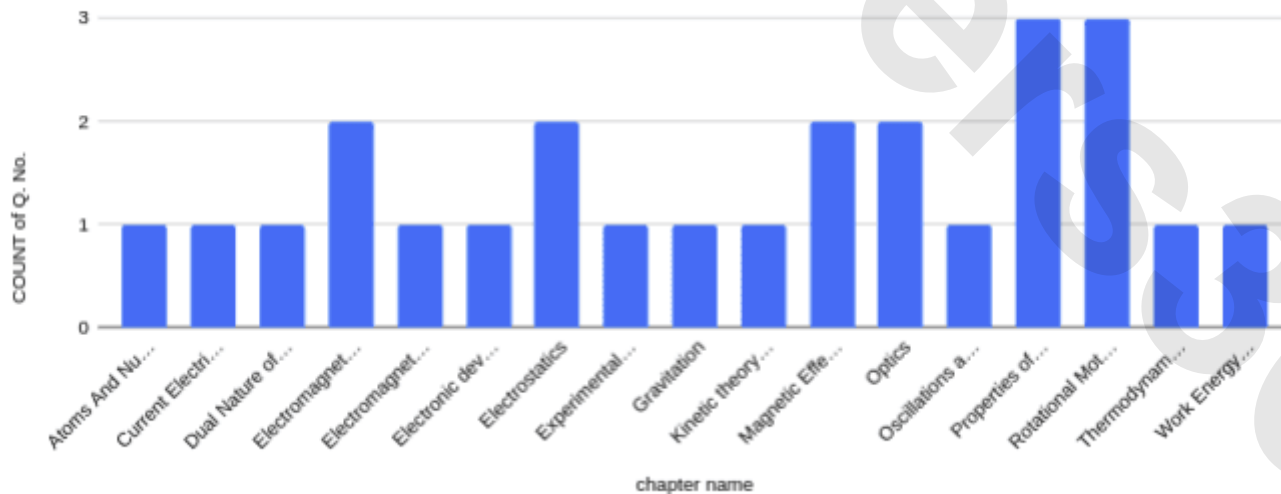
JEE Main 2020 September 3 shift 1 Physics Paper Analysis:

As usual most of the questions were numerical based on equations and concepts studied. Out of 25 questions analysed 5% are difficult, 5% is easy and rest are moderate level questions. The difficulty wise analysis and the chapter wise and topic wise distribution of questions are given below.

Difficulty level analysis: Physics



Count of Questions vs. Chapter - Physics - 25 Questions



Chapter wise and topic wise distribution of questions physics:

Q. No.	chapter name	concept name	Difficulty level

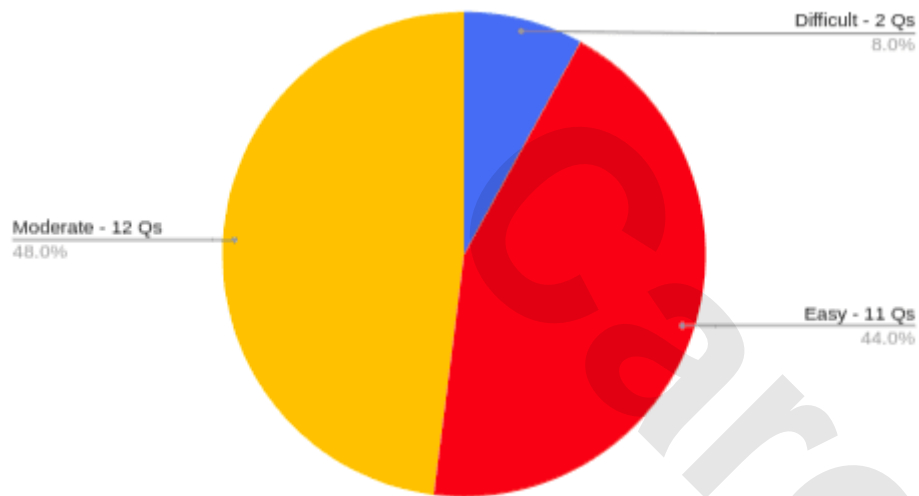
1	Magnetic Effects of Current and Magnetism	Lorentz force	easy
2	Electrostatics	Combination of capacitors	medium
3	Optics	Young's double slit experiment -1	easy
4	Rotational Motion	Work, Energy and Power for Rotating Body	Difficult
5	Optics	Real depth and Apparent depth	medium
6	Work Energy and Power	Law of Conservation of Energy	difficult
7	Rotational Motion	Conservation of angular momentum	medium
8	Properties of Solids and Liquids	Rise of liquid in a capillary tube	medium
9	Properties of Solids and Liquids	Thermal Expansion in liquids and gases	medium
10	Gravitation	Time period and energy of a satellite	difficult
11	Experimental skills	To measure the thickness of the given sheet using screw gauge	medium
12	Oscillations and Waves	Speed of transverse wave on a string	difficult
14	Dual Nature of Matter and Radiation	Einstein's Photoelectric equation	medium

15	Electronic devices	Semiconductor Diode(I)	medium
16	Magnetic Effects of Current and Magnetism	Magnetic Field due to current in straight wire	Medium
17	Thermodynamics	Adiabatic Process	easy
18	Electromagnetic Induction and Alternating currents	Series LCR circuit	Medium
19	Electromagnetic Waves	Nature of electromagnetic waves	easy
20	Kinetic theory of gases	Kinetic energy of ideal gas	Easy
21	Electrostatics	Electric potential due to continuous charge distribution(II)	Medium
22	Rotational motion	Moment of inertia of the SOLID CYLINDER	Medium
23	Current Electricity	Resistance and resistivity	Medium
24	Atoms And Nuclei	Law of radioactivity decay	Easy
25	Electromagnetic Induction and Alternating currents	Faraday's law of induction	difficult

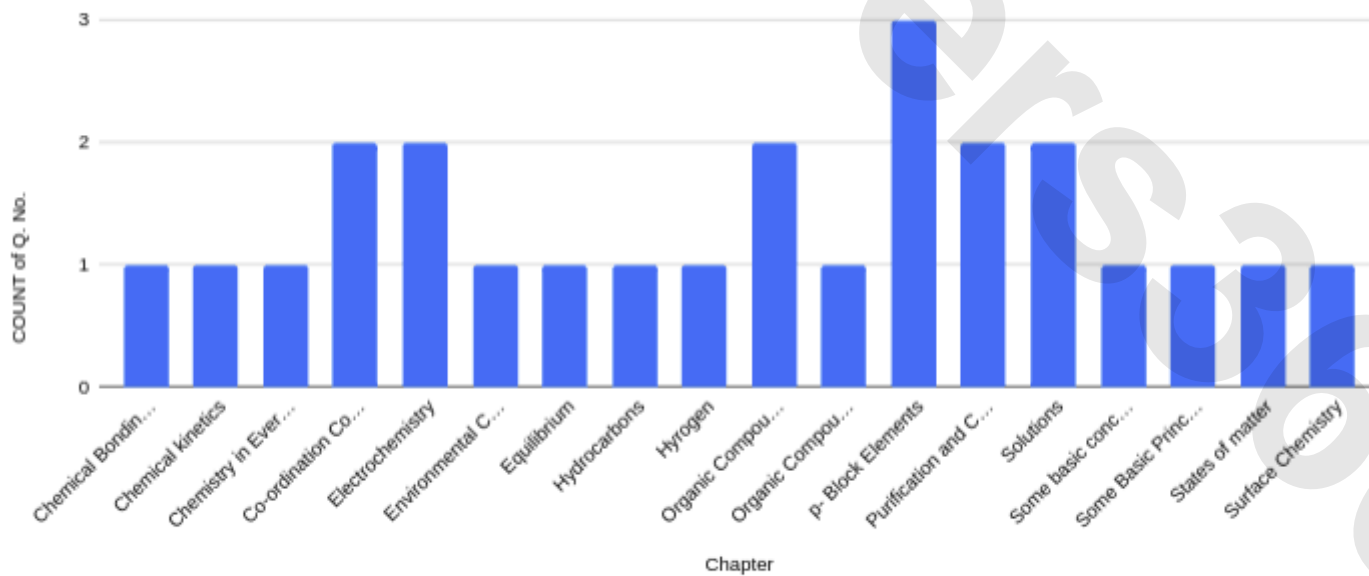
JEE Main 2020 September 3 shift 1 Chemistry Paper Analysis:

Out of 25 questions analysed 4% are difficult, 52% are easy and rest are moderate level questions. The difficulty level analysis and the chapter wise and topic wise distribution of chemistry questions are followed after this paragraph. The chemistry paper of JEE Main September 3 shift 1 has given more importance to physical chemistry. Overall paper was easy to moderate level

Difficulty level distribution: Chemistry



Count of Questions vs. Chapter - Chemistry - 25 Questions



Chapter wise and topic wise distribution of questions chemistry:

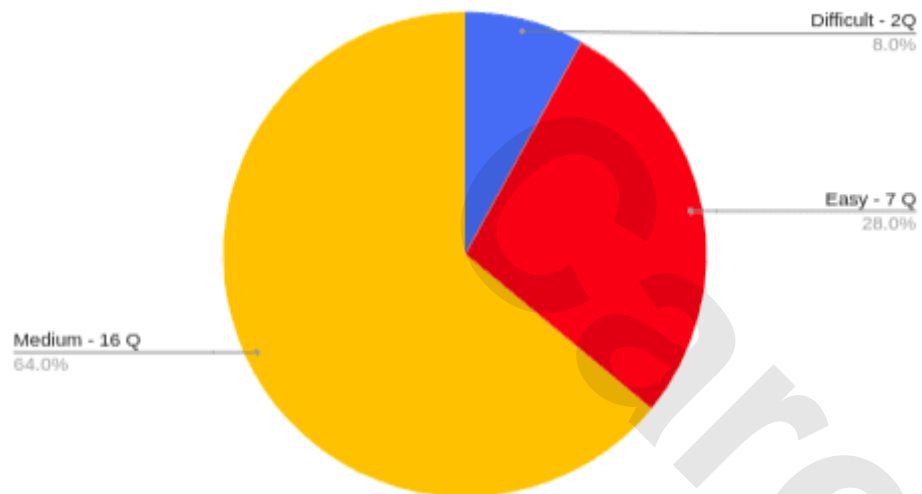
Q. No.	Chapter	Topic	Level of Difficulty
1	Equilibrium	Buffer	Easy
2	Some basic concepts in chemistry	IUPAC naming	Easy
3	Electrochemistry	Conductance	Moderate
4	Hydrocarbons	Reactions of alkenes	Moderate
5	p- Block Elements	Group 15	Easy
6	Purification and Characterisation of Organic Compounds	Kjeldahl Method	Moderate
7	Environmental Chemistry	Pollution	Easy
8	Organic Compounds containing Halogens	Nucleophilic Substitution	Moderate
9	Chemical Bonding and Molecular Structure	Molecular Orbital Theory	Easy
10	Chemical kinetics	Order and Molecularity	Easy
11	p- Block Elements	Group 16	Easy
12	Chemistry in Everyday Life	Drugs	Moderate
13	Organic Compounds containing Oxygen	Esters	Moderate
14	Solutions	Henry's law	Difficult
15	Surface Chemistry	Colloids	Easy

16	Co-ordination Compounds	Isomerism	Moderate
17	Purification and Characterisation of Organic Compounds	Distillation	Easy
18	Co-ordination Compounds	CFSE	Moderate
19	p- Block Elements	Group 15	Moderate
20	Some Basic Principles of Organic Chemistry	Acidic Strength	Easy
21	States of matter	Density of Solids	Moderate
22	Hydrogen	Volume Strength of H ₂ O ₂	Easy
23	Electrochemistry	Electrochemical Cell	Difficult
24	Organic Compounds containing Halogens	Preparation	Moderate
25	Solutions	Concentration Terms	Moderate

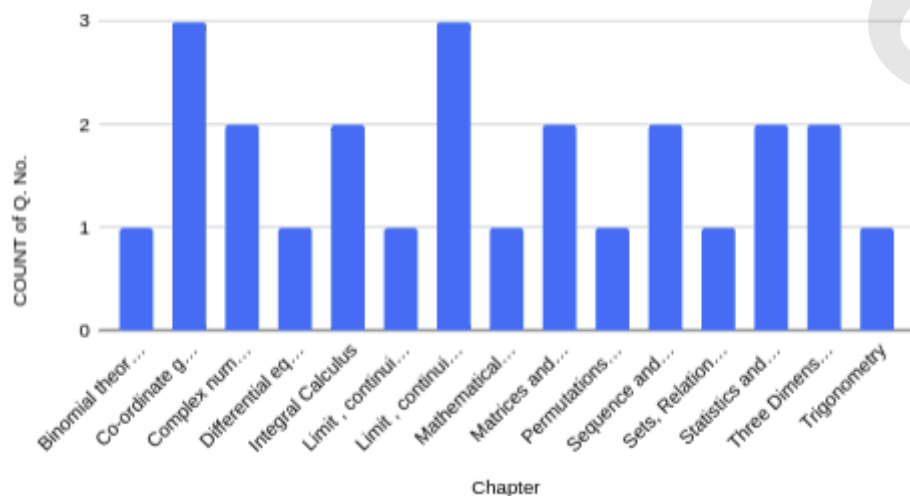
JEE Main 2020 September 3 shift 1 Maths Paper Analysis:

Enough practice is required to complete the Mathematics session on time. The analysis of JEE Main 2020 mathematics paper of 3rd September shift 1 shows that most of the questions were moderate. The overall analysis of 25 questions based on the difficulty level is provided below. The analysis shows that 64% of the questions are of moderate level.

Difficulty level analysis: Maths



Count of Questions vs. Chapter - Maths - 25 Questions



Q. No.	Chapter	Topic	Level of Difficulty
1	Three	Intersection of Lines	Medium

	Dimensional Geometry		
2	Mathematical Reasoning	Truth Table	Easy
3	Complex numbers and quadratic equations	Sum of roots	Medium
4	Trigonometry	Sum and difference of angles in terms of arcsin	Easy
5	Limit , continuity and differentiability, Trigonometry	Derivative of the Logarithm and Exponential Function, Derivative of the Trigonometric Function (cos/sine/tan)	Medium
6	Sets, Relations and Functions	Union of sets, Properties of Union, Difference of Set	Medium
7	Limit , continuity and differentiability	Monotonicity (Increasing and Decreasing Function)	Medium
8	Co-ordinate geometry	parabola	Difficult
9	Statistics and Probability	Standered Deviation	Difficult
10	Binomial theorem and its simple applications	General Term of Binomial Expansion	Medium

11	Integral Calculus	Definite Integrals, Properties of the Definite Integral	Easy
12	Differential equations	Homogeneous Differential Equation	Medium
13	Statistics and Probability	Conditional Probability	Medium
14	Integral Calculus	Area Bounded by Two Curves	Medium
15	Limit, continuity and differentiability, Trigonometry	Limits	Medium
16	Matrices and Determinants	Determinants	Medium
17	Permutations and combinations	PERMUTATION AS AN ARRANGEMENT	Medium
18	Three Dimensional Geometry	Foot of Perpendicular	Medium
19	Co-ordinate geometry	Hyperbola	Medium
20	Sequence and series	Sum of AP	Easy
21	Complex numbers and	Powers of i	Easy

	quadratic equations		
22	Sequence and series	Sum of GP	Easy
23	Limit , continuity and differentiability, Trigonometry	Trigonometric Limits	Medium
24	Co-ordinate geometry	Perpendicular Distance from a Point	Easy
25	Matrices and Determinants	Multiplication of Matrix	Medium

The overall analysis of all the three papers shows that the September 3rd 2020 JEE Main shift 1 exam is of moderate level. In physics, the number of questions were more from 12 th topic and have given more weightage to properties of solids and liquids and rotational motion. In the case of chemistry, more questions are asked from physical chemistry and more number of questions are asked from the P block elements. The overall maths paper was moderate giving more importance to coordinate geometry and limits continuity and differentiability.