

IIT-JEE 2012: A Detailed Analysis by Resonance

One of the toughest Entrance Examination in the world, IIT-JEE 2012, was conducted on 8 March 2012 (Sunday). Around 5.6 Lakh students appeared for this exam.

IIT-JEE 2012 was conducted in two parts (Paper 1 and Paper 2). Paper 1 was conducted from 9 AM to 12 PM and Paper 2 was conducted from 2 PM to 5 PM.

OVERALL MARKS DISTRIBUTION OF IIT-JEE 2012

Subject		Paper 1	Paper 2	Total
Physics	No of Questions	20	20	40
	Total Marks	70	66	136
Chemistry	No of Questions	20	20	40
	Total Marks	70	66	136
Mathematics	No of Questions	20	20	40
	Total Marks	70	66	136
Total	No of Questions	60	60	120
	Total Marks	210	198	408

Class wise Distribution of Questions and Marks

Subject	Paper	No of Questions		Marks	
		11th	12th	11th	12th
Physics	Paper 1	7	13	24	46
	Paper 2	9	11	28	38
Chemistry	Paper 1	7	13	23	47
	Paper 2	6	14	21	45
Mathematics	Paper 1	8	12	28	42
	Paper 2	6	14	18	48
Total	Paper 1	22	38	75	135
	Paper 2	21	39	67	131

OVERALL DIFFICULTY LEVEL ANALYSIS

In this analysis we have rated every question on a scale of 1 to 5. The ratings are done by expert faculty of Resonance. The individual ratings are then averaged to calculate over all difficulty level.

- 1: Very Easy
- 3: Moderate
- 5: Very Difficult
- 2: Easy
- 4: Difficult

Subject	Paper 1	Paper 2	Total
Physics	2.55	2.9	2.725
Chemistry	2.78	3.2	2.99
Mathematics	3.25	3	3.125
Total	2.86	3	2.93

Difficulty Level Analysis: No of Questions

Subject	Very Easy	Easy	Moderate	Difficult	Very Difficult	Total
Physics	5	10	16	9		40
Chemistry	3	5	20	11	1	40
Mathematics	1	8	18	11	2	40
Total	9	23	54	31	3	120

Difficulty Level Analysis: Marks Allocation

Subject	Very Easy	Easy	Moderate	Difficult	Very Difficult	Total
Physics	15	32	58	31	0	136
Chemistry	9	15	70	38	4	136
Mathematics	3	25	63	37	8	136
Total	27	72	191	106	12	408

BRIEF QUANTITATIVE ANALYSIS OF PAPER 1

Subject		Single Answer Type Multiple Choice (Negative Marking of -1)	Multiple Answer Type Multiple Choice	Single Digit Integer Type	Total
Physics	No of Questions	10	5	5	20
	Marks / Question	3	4	4	
	Total Marks	30	20	20	70
Chemistry	No of Questions	10	5	5	20
	Marks / Question	3	4	4	
	Total Marks	30	20	20	70
Mathematics	No of Questions	10	5	5	20
	Marks / Question	3	4	4	
	Total Marks	30	20	20	70
Total	No of Questions	30	15	15	60
	Total Marks	90	60	60	210

BRIEF QUANTITATIVE ANALYSIS OF PAPER 2

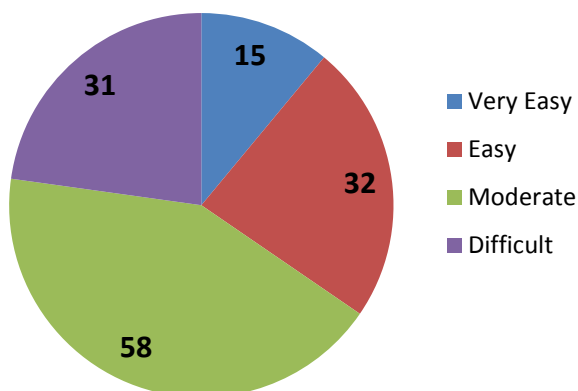
Subject		Single Answer Type Multiple Choice (Negative Marking of -1)	Multiple Answer Type Multiple Choice	Comprehension Single Answer Type Multiple Choice (Negative Marking of -1)	Total
Physics	No of Questions	8	6	6	20
	Marks/ Question	3	4	3	
	Total Marks	24	24	18	66
Chemistry	No of Questions	8	6	6	20
	Marks/ Question	3	4	3	
	Total Marks	24	24	18	66
Mathematics	No of Questions	8	6	6	20
	Marks/ Question	3	4	3	
	Total Marks	24	24	18	66
Total	No of Questions	24	18	18	60
	Total Marks	72	72	54	198

PHYSICS ANALYSIS: OVERALL

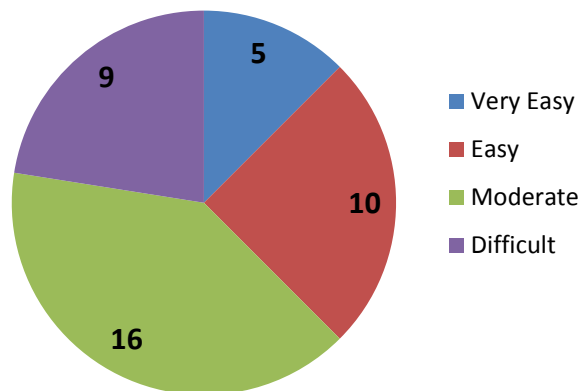
Topic wise Allocation of Marks

Subject / Topic	No of Questions	Total Marks	% Weightage
Rotation (Rigid Body Dynamics)	7	24	17.6%
Electro Magnetic Field	5	18	13.2%
Electrostatics	4	15	11.0%
Geometrical Optics	3	9	6.6%
Modern Physics 1	2	7	5.1%
Sound Waves	2	7	5.1%
Modern Physics 2	2	6	4.4%
Kinetic Theory of Gases	2	6	4.4%
Circular Motion	2	6	4.4%
Current Electricity	1	4	2.9%
Gravitation	1	4	2.9%
Electro Magnetic Induction	1	4	2.9%
Alternating Current	1	4	2.9%
Friction	1	4	2.9%
Simple Harmonic Motion	1	3	2.2%
Wave Optics	1	3	2.2%
Capacitance	1	3	2.2%
Fluids	1	3	2.2%
Experiments & Error Analysis	1	3	2.2%
Heat Transfer	1	3	2.2%
Grand Total	40	136	100.0%

Difficulty Level Wise Marks Allocation



Difficulty Level Wise No of Question

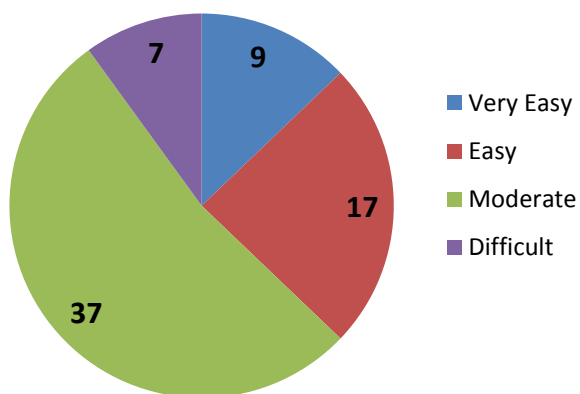


PHYSICS ANALYSIS: PAPER 1

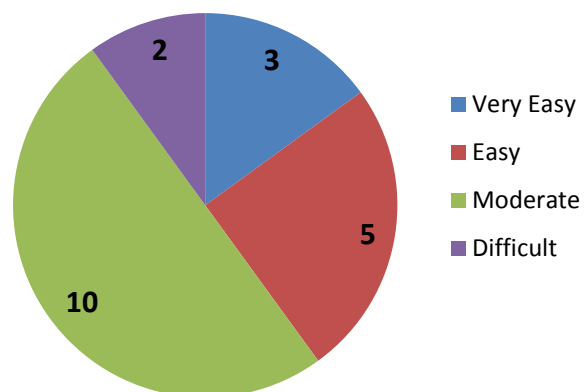
Topic wise Allocation of Marks

Subject / Topic	No of Questions	Total Marks	% Weightage
Electrostatics	3	11	15.7%
Rotation (Rigid Body Dynamics)	3	10	14.3%
Electro Magnetic Field	2	8	11.4%
Modern Physics 1	2	7	10.0%
Electro Magnetic Induction	1	4	05.7%
Friction	1	4	05.7%
Sound Waves	1	4	05.7%
Current Electricity	1	4	05.7%
Simple Harmonic Motion	1	3	04.3%
Kinetic Theory of Gases	1	3	04.3%
Heat Transfer	1	3	04.3%
Experiments & Error Analysis	1	3	04.3%
Wave Optics	1	3	04.3%
Geometrical Optics	1	3	04.3%
Grand Total	20	70	100%

Difficulty Level Wise Marks Allocation



Difficulty Level Wise No of Question

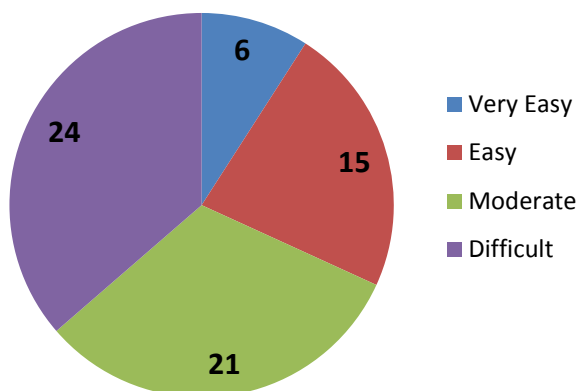


PHYSICS ANALYSIS: PAPER 2

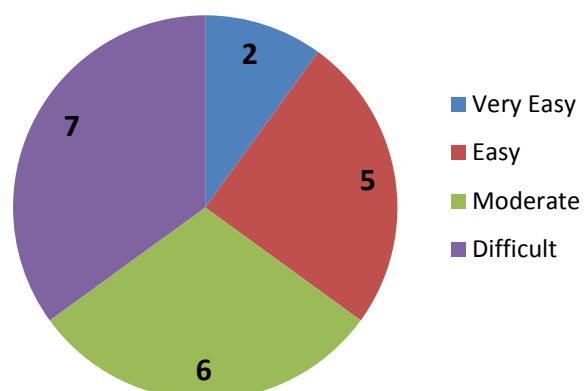
Topic wise Allocation of Marks

Subject / Topic	No of Questions	Total Marks	% Weightage
Rotation & RBD	4	14	21.2%
EMF	3	10	15.2%
Circular Motion	2	6	09.1%
Modern Physics 2	2	6	09.1%
Geometrical Optics	2	6	09.1%
Electrostatics	1	4	06.1%
Gravitation	1	4	06.1%
Alternating Current	1	4	06.1%
KTG	1	3	04.5%
Sound Waves	1	3	04.5%
Capacitance	1	3	04.5%
Fluids	1	3	04.5%
Grand Total	20	66	100%

Difficulty Level Wise Marks Allocation



Difficulty Level Wise Que Distribution

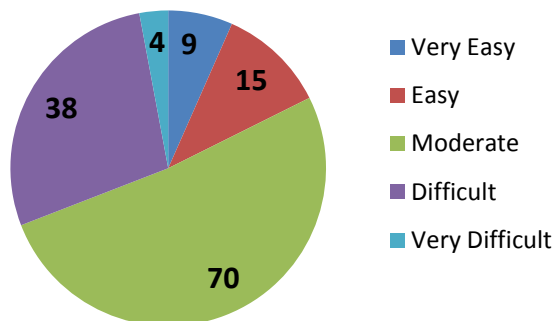


CHEMISTRY ANALYSIS: OVERALL

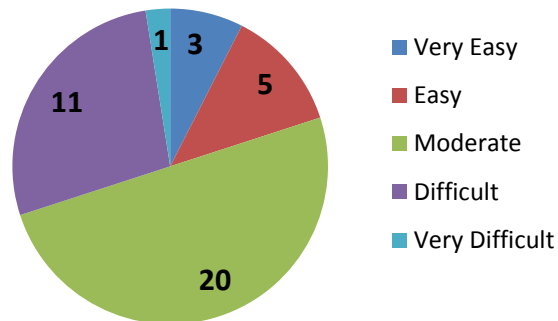
Topic wise Allocation of Marks

Subject / Topic	No of Questions	Total Marks	% Weightage
Carbonyl Compound	4	12	8.8%
P-Block Elements	3	10	7.4%
Bio Molecules	2	8	5.9%
Thermodynamics	2	8	5.9%
Surface Chemistry	2	8	5.9%
Qualitative Analysis	2	8	5.9%
POC -1 & Structural Identification	2	7	5.1%
Atomic Structure & Nuclear Chemistry	2	7	5.1%
Mole Concepts 1	2	7	5.1%
Chemical Bonding	2	6	4.4%
Coordination Compound	2	6	4.4%
Electrochemistry	2	6	4.4%
Chemical Kinetics	1	4	2.9%
Aromatic Compounds	1	4	2.9%
Oxidation Reduction	1	4	2.9%
Isomerism	1	4	2.9%
Thermochemistry	1	3	2.2%
Solid State	1	3	2.2%
Mole Concepts 2	1	3	2.2%
Colligative Properties	1	3	2.2%
Metallurgy	1	3	2.2%
Gaseous State	1	3	2.2%
D-Block Elements	1	3	2.2%
Carboxylic Acid & Derivatives	1	3	2.2%
IUPAC Nomenclature	1	3	2.2%
Grand Total	40	136	100.0%

Difficulty Level Wise Marks Allocation



Difficulty Level Wise No of Question

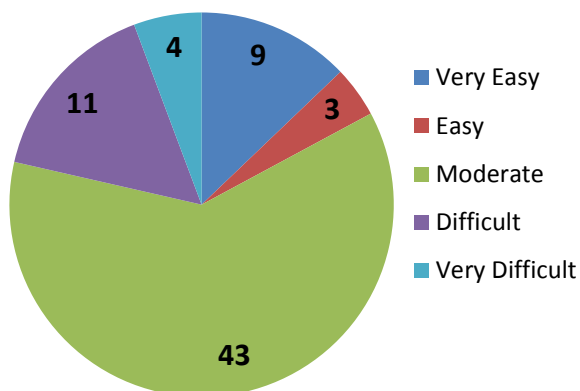


CHEMISTRY ANALYSIS: PAPER 1

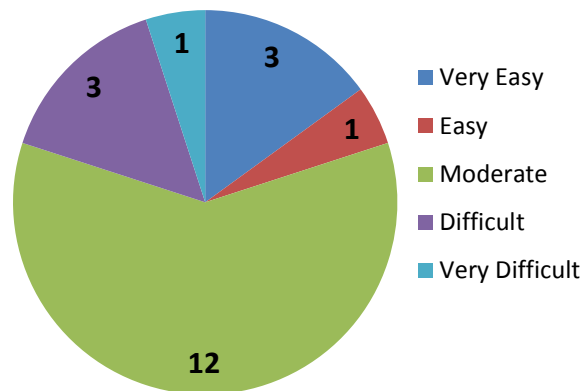
Topic wise Allocation of Marks

Subject / Topic	No of Questions	Total Marks	% Weightage
Bio Molecules	2	8	11.4%
Mole Concepts 1	2	7	10.0%
Atomic Structure & Nuclear Chemistry	2	7	10.0%
POC -1 & Structural Identification	2	7	10.0%
Thermodynamics	1	4	05.7%
Qualitative Analysis	1	4	05.7%
Surface Chemistry	1	4	05.7%
Chemical Kinetics	1	4	05.7%
Aromatic Compounds	1	4	05.7%
Chemical Bonding	1	3	04.3%
Gaseous State	1	3	04.3%
Solid State	1	3	04.3%
Carbonyl Compounds	1	3	04.3%
IUPAC Nomenclature	1	3	04.3%
Coordination Compounds	1	3	04.3%
D-Block Elements	1	3	04.3%
Grand Total	20	70	100%

Difficulty Level Wise Marks Allocation



Difficulty Level Wise No of Question



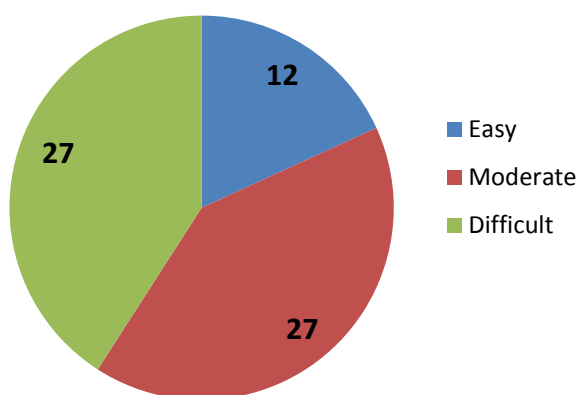
CHEMISTRY ANALYSIS: PAPER 2

Topic wise Allocation of Marks

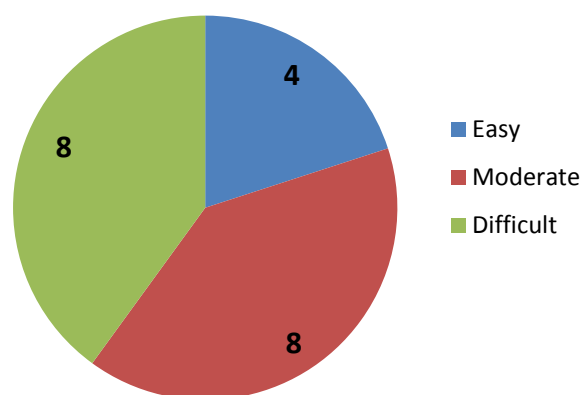
Subject / Topic	No of Questions	Total Marks	% Weightage
P-Block Elements	3	10	15.2%
Carbonyl Compound	3	9	13.6%
Electrochemistry	2	6	9.1%
Thermodynamics	1	4	6.1%
Qualitative Analysis	1	4	6.1%
Surface Chemistry	1	4	6.1%
Oxidation Reduction	1	4	6.1%
Isomerism	1	4	6.1%
Chemical Bonding	1	3	4.5%
Thermochemistry	1	3	4.5%
Colligative Properties	1	3	4.5%
Coordination Compound	1	3	4.5%
Mole Concepts 2	1	3	4.5%
Carboxylic Acid & Derivatives	1	3	4.5%
Metallurgy	1	3	4.5%
Grand Total	20	66	100%

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Difficulty Level Wise Marks Allocation



Difficulty Level Wise Marks Allocation

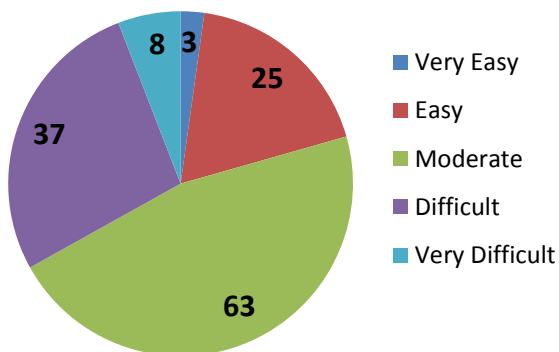


MATHEMATICS ANALYSIS: OVERALL

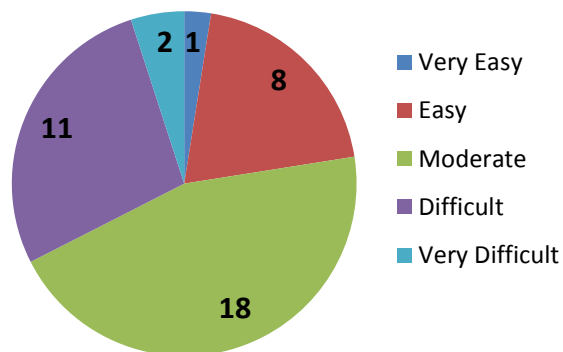
Topic wise Allocation of Marks

Subject / Topic	No of Questions	Total Marks	% Weightage
Definite Integration	4	13	9.6%
Application of Derivatives	3	12	8.8%
Probability	3	11	8.1%
3D Geometry	3	10	7.4%
Matrices & Determinant	3	10	7.4%
Permutation & Combination	3	9	6.6%
Circle	3	9	6.6%
Continuity & Derivability	2	7	5.1%
Vector	2	7	5.1%
Functions	2	7	5.1%
Limits	2	6	4.4%
Trigonometric Equations	1	4	2.9%
Differential Equations	1	4	2.9%
Parabola	1	4	2.9%
Fundamentals of Mathematics	1	4	2.9%
Hyperbola	1	4	2.9%
Indefinite Integration	1	3	2.2%
Complex Number	1	3	2.2%
Ellipse	1	3	2.2%
Properties of Triangle	1	3	2.2%
Sequence and Progression	1	3	2.2%
Grand Total	40	136	100.0%

Difficulty Level Wise Marks Allocation



Difficulty Level Wise No of Question

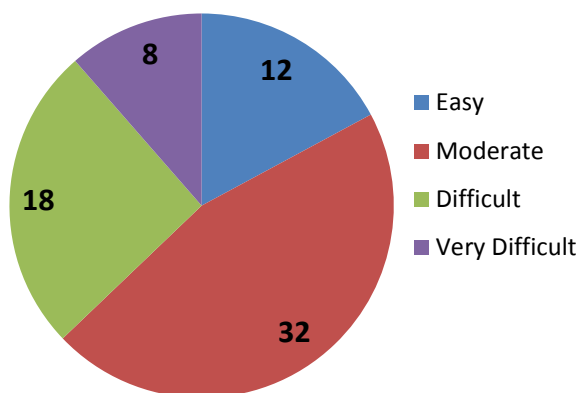


MATHEMATICS ANALYSIS: PAPER 1

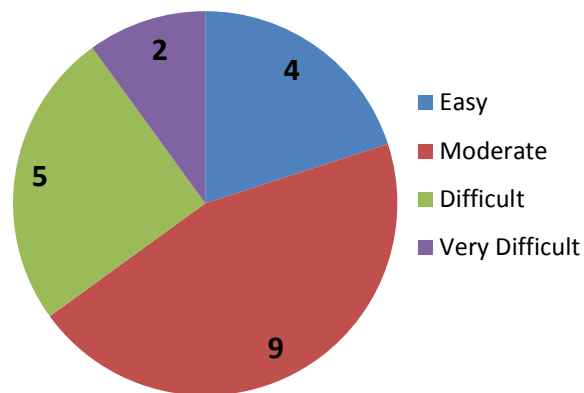
Topic wise Allocation of Marks

Subject / Topic	No of Questions	Total Marks	% Weightage
Application of Derivatives	2	8	11.4%
Hyperbola	1	4	05.7%
Trigonometric Equations	1	4	05.7%
Parabola	1	4	05.7%
Probability	1	4	05.7%
Definite Integration	1	4	05.7%
Vector	1	4	05.7%
Differential Equations	1	4	05.7%
Fundamentals of Mathematics	1	4	05.7%
Complex Number	1	3	04.3%
Circle	1	3	04.3%
Functions	1	3	04.3%
Continuity & Derivability	1	3	04.3%
Permutation & Combination	1	3	04.3%
Indefinite Integration	1	3	04.3%
Ellipse	1	3	04.3%
Limits	1	3	04.3%
3D Coordinate Geometry	1	3	04.3%
Matrices & Determinants	1	3	04.3%
Grand Total	20	70	100%

Difficulty Level Wise Marks Allocation



Difficulty Level Wise No of Question

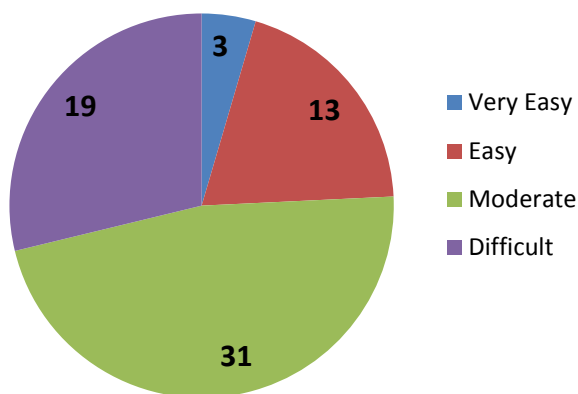


MATHEMATICS ANALYSIS: PAPER 2

Topic wise Allocation of Marks

Subject / Topic	No of Questions	Total Marks	% Weightage
Definite Integration	3	9	13.7%
3D Geometry	2	7	10.2%
Matrices & Determinant	2	7	10.2%
Probability	2	7	10.2%
Permutation and Combination	2	6	09.2%
Circle	2	6	09.2%
Application of Derivatives	1	4	06.2%
Continuity and Derivability	1	4	06.2%
Functions	1	4	06.2%
Vectors	1	3	04.6%
Sequence and Progression	1	3	04.6%
Properties of Triangle	1	3	04.6%
Limits	1	3	04.6%
Grand Total	20	66	100%

Difficulty Level Wise Marks Allocation



Difficulty Level Wise No of Question

