# JEE ADVANCED 2017 PAPER ANALYSIS







## JEE Advanced 2017 Paper Analysis

The Joint Entrance Examination (JEE) Advanced 2017 was conducted on 21<sup>st</sup> of May 2017. Over 2, 20,000 students who had aced the JEE Main Examination appeared in JEE Advanced 2017. This exam is conducted in the seven zonal IITs under the guidance of the Joint Admission Board (JAB) 2017. According to JAB, the performance of a candidate in this examination will form the basis for admission to the bachelor's, integrated master's and dual degree programs (entry at the 10+2 level) in Indian School of Mines (ISM), Dhanbad and in all the Indian Institutes of Technology (IITs) across the country. The examination consists of two papers, Paper 1 and Paper 2, each of three hours duration. While Paper 1 is scheduled to be from 9 am to 12 pm, Paper 2 is conducted from 2 pm to 5 pm.

### **Paper Format Analysis**

#### Paper 1:

The Paper-1 of JEE Advanced 2017 was conducted from 9am to 12pm. In terms of paper format, Paper 1 of JEE Advanced 2017 differed significantly from its counterpart last year both in term of sections as well as the weights of each of the sections. While the total number of questions in the entire paper remained the same as last year at 18, there are differences in section wise distribution of these questions and nature of questions asked in various sections as well. The maximum marks achievable in this paper are 61 in each subject when compared to 62 marks in each subject last year. We present a section wise analysis in the following pages.



#### Paper 1: Section 1

#### SECTION 1 (Maximum Marks: 28)

- This section contains SEVEN questions
- Each question has FOUR options [A], [B], [C] and [D]. ONE OR MORE THAN ONE of these four options is(are) correct
- For each question, darken the bubble(s) corresponding to all the correct option(s) in the ORS
- For each question, marks will be awarded in one of the following categories:

Full Marks : +4 If only the bubble(s) corresponding to all the correct option(s)

is(are) darkened

Partial Marks: +1 For darkening a bubble corresponding to each correct option,

provided NO incorrect option is darkened

Zero Marks : 0 If none of the bubbles is darkened

Negative Marks : -2 In all other cases

For example, if [A], [C] and [D] are all the correct options for a question, darkening all these
three will get +4 marks; darkening only [A] and [D] will get +2 marks; and darkening [A]
and [B] will get -2 marks, as a wrong option is also darkened

Section 1 of JEE Advanced 2017 Paper-1 corresponded to section 2 of JEE Advanced 2016 Paper-1. It is a **multiple correct answer** section with full marks of +4, partial marks of +1 for each correct option and negative marking of -2 on selection of wrong answer. There were **eight** such questions in JEE Advanced 2016's section 2, while there are **seven** such this year in section 1. This is a high risk high reward category of questions. While there is a temptation to mark all correct answers to get full marks, the penalty is very high on wrong answers so there is no reason to guess answers in this section. Of a total of 61 marks, the maximum weight was in this section, numerically 28. This implies that maximum time was to be devoted to this section for each subject.



#### Paper 1: Section 2

SECTION 2 (Maximum Marks: 15)

- · This section contains FIVE questions
- The answer to each question is a SINGLE DIGIT INTEGER ranging from 0 to 9, both inclusive
- · For each question, darken the bubble corresponding to the correct integer in the ORS
- · For each question, marks will be awarded in one of the following categories:

Full Marks : +3 If only the bubble corresponding to the correct answer is darkened

Zero Marks : 0 In all other cases

Section 2 of JEE Advanced 2017 Paper-1 corresponded to section 3 of JEE Advanced 2016 Paper-1. It is a **single digit integer** section with no partial or negative marking and full marks of +3. Just like last year, there are **five** such questions in this category. This is a low risk low reward category of questions. There is no risk in guessing the answer, but the possibility of randomly getting a right answer in ten options is very low. Of a total of 61 marks, the minimum weight was in this section, numerically 15. This implies that this section was to be devoted least amount of time.



#### Paper 1: Section 3

#### **SECTION 3 (Maximum Marks: 18)**

- · This section contains SIX questions of matching type
- This section contains TWO tables (each having 3 columns and 4 rows)
- · Based on each table, there are THREE questions
- Each question has FOUR options [A], [B], [C], and [D]. ONLY ONE of these four options
  is correct
- For each question, darken the bubble corresponding to the correct option in the ORS
- For each question, marks will be awarded in one of the following categories:

Full Marks: +3 If only the bubble corresponding to the correct option is darkened

Zero Marks: 0 If none of the bubbles is darkened

Negative Marks: -1 In all other cases

Section 3 of JEE Advanced 2017 Paper-1 is the first of its kind. It is a **matching type** section where based on situations described in two tables, three questions each were asked with +3 marks for correct answer and a penalty of -1 for incorrect answers. There are **six** questions in this category. This is a moderate risk moderate reward category of questions. The penalty for wrong answer is not high enough to deter guessing, and 1 correct guess out of 4 can settle the account. Of a total of 61 marks this section had a weight of 18.



#### Paper 2:

The Paper-2 of JEE Advanced 2017 was conducted from 2pm to 5pm. In terms of paper format, Paper 2 of JEE Advanced 2017 differed very slightly from its counterpart last year. The total number of questions as well as the various sections remained the same as last year namely 18 questions and 3 sections, but there are variations in distribution of these questions across sections. The maximum marks achievable in this paper are 61 in each subject when compared to 62 marks in each subject last year. We present a section wise analysis in the following pages.

#### Paper 2: Section 1

#### SECTION 1 (Maximum Marks: 21)

- · This section contains SEVEN questions
- Each question has FOUR options [A], [B], [C] and [D]. ONLY ONE of these four options is
  correct
- · For each question, darken the bubble corresponding to the correct option in the ORS
- · For each question, marks will be awarded in one of the following categories:

Full Marks : +3 If only the bubble corresponding to the correct option is darkened

Zero Marks : 0 If none of the bubbles is darkened

Negative Marks: -1 In all other cases

Section 1 of JEE Advanced 2017 Paper-2 is identical to section 1 of JEE Advanced 2016 Paper-2 except for the number of questions. It is a **single correct answer** section with full marks of +3 and a penalty of -1 for incorrect answers. There were **six** such questions in JEE Advanced last year, while there are **seven** such this year. This is a moderate risk moderate reward category of questions. Like section 3 of Paper-1 the penalty for wrong answer is not high enough to deter guessing, and 1 correct guess out of 4 can settle the account. Of total 61 marks this section had a weight of 21, making it a moderate section in all aspects.



#### Paper 2: Section 2

#### SECTION 2 (Maximum Marks: 28)

- This section contains SEVEN questions
- Each question has FOUR options [A], [B], [C] and [D]. ONE OR MORE THAN ONE of these four options is(are) correct
- · For each question, darken the bubble(s) corresponding to all the correct option(s) in the ORS
- · For each question, marks will be awarded in one of the following categories:

Full Marks : +4 If only the bubble(s) corresponding to all the correct option(s)

is(are) darkened

Partial Marks : +1 For darkening a bubble corresponding to each correct option,

provided NO incorrect option is darkened

Zero Marks : 0 If none of the bubbles is darkened

Negative Marks : -2, In all other cases

For example, if [A], [C] and [D] are all the correct options for a question, darkening all these
three will get +4 marks; darkening only [A] and [D] will get +2 marks; and darkening [A]
and [B] will get -2 marks, as a wrong option is also darkened

Section 2 of JEE Advanced 2017 Paper-2 is again identical to section 2 of JEE Advanced 2016 Paper-2 except for the number of questions. It is a **multiple correct answer** section with full marks of +4, partial marks of +1 for each correct option and negative marking of -2 on selection of wrong answer. There were **eight** such questions in JEE Advanced last year, while there are **seven** such this year. Identical to section 1 of Paper-1, this is a high risk high reward category of questions. Guessing should be avoided, and only the answers sure to be correct should be marked. Of a total of 61 marks, the maximum weight was in this section, numerically 28. This implies that maximum time was to be devoted to this section for each subject.



#### Paper 2: Section 3

#### **SECTION 3 (Maximum Marks: 12)**

- · This section contains TWO paragraphs
- · Based on each paragraph, there are TWO questions
- Each question has FOUR options [A], [B], [C], and [D]. ONLY ONE of these four options is correct
- · For each question, darken the bubble corresponding to the correct option in the ORS
- · For each question, marks will be awarded in one of the following categories:

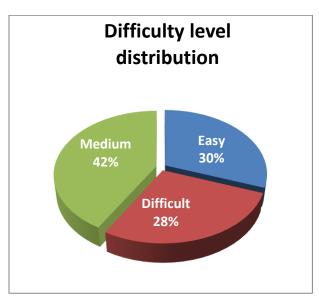
Full Marks: +3 If only the bubble corresponding to the correct option is darkened

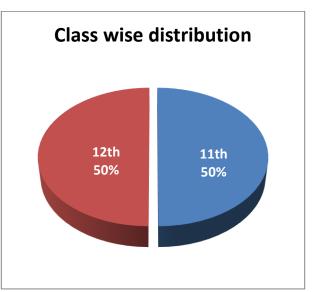
Zero Marks : 0 In all other cases

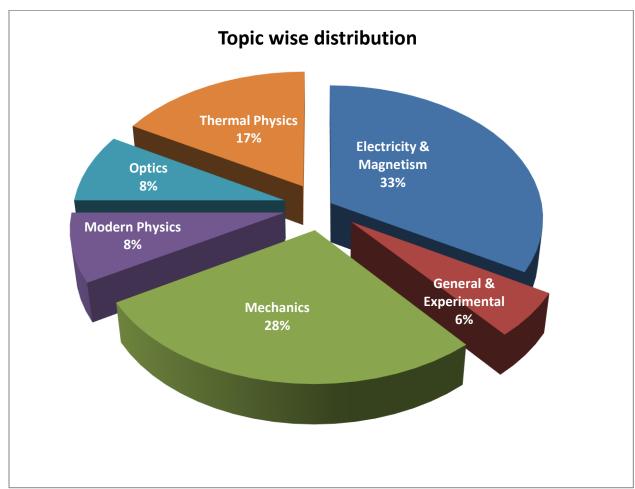
Section 3 of JEE Advanced 2017 Paper-2 is absolutely identical to section 3 of JEE Advanced 2016 Paper-2. It is a **paragraph style single correct answer** section with full marks of +3 and no negative marks for incorrect answers. There were **four** such questions in JEE Advanced in both last year and this year. This is a no risk moderate reward category of questions. There is no risk in guessing the answer, and there is a decent chance of getting the guess right. Of a total of 61 marks, the minimum weight was in this section, numerically 12. This implies that this section was to be devoted least amount of time.



## **Physics**

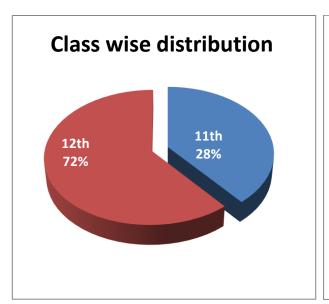


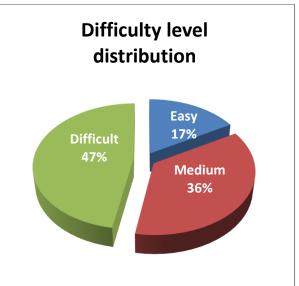


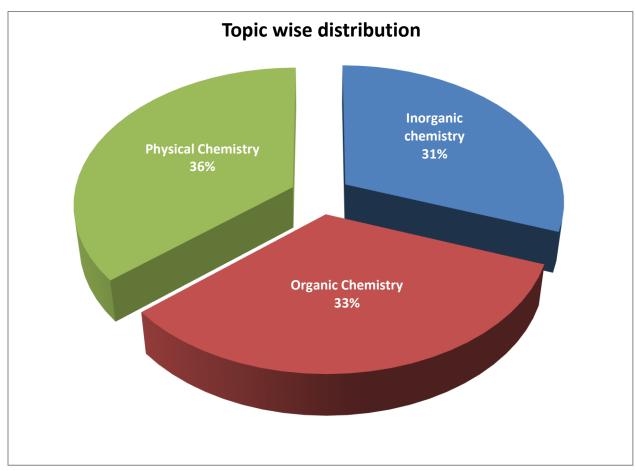




## **Chemistry**

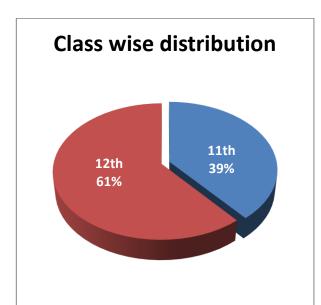


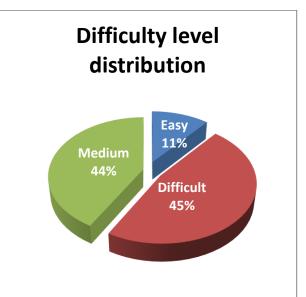


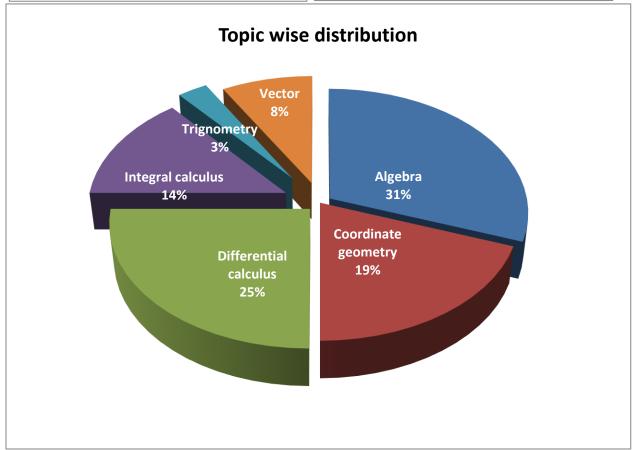




## **Mathematics**









## **JEE Advanced Cutoff Across Years**

Category Name	Minimum percentage of marks in each subject				Minimum percentage of aggregate marks			
	2014	2015	2016	2017*	2014	2015	2016	2017*
Common rank list (CRL)	10	7	10	10	35	24.5	20	20
OBC-NCL rank list	9	6.3	9	9	31.5	22.05	18	18
SC rank list	5	3.5	5	5	17.5	12.25	10	10
ST rank list	5	3.5	5	5	17.5	12.25	10	10
Common-PwD rank list (CRL-PwD)	5	3.5	5	5	17.5	12.25	10	10
OBC-NCL-PwD rank list	5	3.5	5	5	17.5	12.25	10	10
SC-PwD rank list	5	3.5	5	5	17.5	12.25	10	10
ST-PwD rank list	5	3.5	5	5	17.5	12.25	10	10
Preparatory course rank lists	2.5	1.75	2.5	2.5	8.75	6.125	5	5
* Data for 2017 as per our estimate, considering similar toughness levels as last year								

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## **New Batches for Class 12th Pass**

24<sup>th</sup> May 2017 | 31<sup>st</sup> May 2017

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