

# MOTION IIT/NIT | NEET | NTSE/IJSO/OLYMPIADS

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## JEE Advanced 2020 Paper Analysis

The Joint Entrance Examination (JEE) Advanced 2020 was conducted on 27<sup>th</sup> of September 2020. Over 1,51,311 students who had aced the JEE Main Examination appeared in JEE Advanced 2020. This exam is conducted by IIT Delhi this year. The performance of a candidate in this examination forms the basis for admission to the bachelor's, integrated master's and dual degree programs (entry at the 10+2 level) 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 9AM to 12 PM, Paper 2 is conducted from 2:30 PM to 5:30PM. The results for JEE Advanced 2020 will be available on October 5, 2020.

The paper conducting method as well as the format has changed compared to last year. This is the third time this exam is conducted on a computer (CBT Mode). The changes in paper format are discussed below in detail.

## Paper Format Analysis - Paper 1

The Paper-1 of JEE Advanced 2020 was conducted from 9 AM to 12 PM. In terms of paper format, Paper 1 of JEE Advanced 2020 differed significantly from its counterpart last year both in terms of section as well as the weight age given to each section. While the total number of questions in the entire paper remained the same as last year at 18, there are differences in the section wise distribution of these questions. The maximum marks achievable in this paper are 66 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: 18)

This section contains SIX (06) questions.

Each question has FOUR options. ONLY ONE of these four options is the correct answer.

· For each question, choose the option corresponding to the correct answer.

Answer to each question will be evaluated according to the following marking scheme:

Full Marks : +3 If ONLY the correct option is chosen;

Zero Marks : 0 If none of the options is chosen (i.e. the question is unanswered);

Negative Marks : -1 In all other cases.

Section 1 of JEE Advanced 2020 Paper I consisted of single correct questions. This pattern has been introduced back after 2016. There were 6 such questions with full mark of +3 and a negative marking of -1. Of a total of 66 marks, nearly 25% of weight age is given to this section. This suggests that this section should in terms of time devoted for this section after section 2 and section 3.

#### Paper 1: Section 2

#### SECTION 2 (Maximum Marks: 24)

- This section contains SIX (06) questions.
- Each question has FOUR options. ONE OR MORE THAN ONE of these four option(s) is(are) correct answer(s).
- For each question, choose the option(s) corresponding to (all) the correct answer(s).
- Answer to each question will be evaluated according to the following marking scheme:

Full Marks : +4 If only (all) the correct option(s) is(are) chosen;

Partial Marks : +3 If all the four options are correct but ONLY three options are chosen;

Partial Marks : +2 If three or more options are correct but ONLY two options are chosen, both of which are

correct;

Partial Marks : +1 If two or more options are correct but ONLY one option is chosen and it is a correct option;

Zero Marks : 0 If none of the options is chosen (i.e. the question is unanswered);

Negative Marks: -2 In all other cases.

Section 2 of JEE Advanced 2020 Paper-1 contains questions. It is a **multiple correctanswer** section with full marks of +4, partial marks of +1 for each correct option and negative marking of -2 on selection of wrong option regardless of selecting a correct option also. There were six such questions in JEE Advanced 2020 section 1, while there were eight such questions in JEE Advanced 2019. 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 Of the totalof66 in this section. marks, around guess answers



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September 2020

35%oftotalweightwasgiventothissection,numerically24. This implies that maximum time was to be devoted to this section for each subject.

#### Paper 1: Section 3

#### SECTION 3 (Maximum Marks: 24)

- This section contains SIX (06) questions. The answer to each question is a NUMERICAL VALUE.
- For each question, enter the correct numerical value of the answer using the mouse and the on-screen virtual numeric keypad in the place designated to enter the answer. If the numerical value has more than two decimal places, truncate/round-off the value to TWO decimal places.
- Answer to each question will be evaluated according to the following marking scheme:

Full Marks : +4 If ONLY the correct numerical value is entered;

Zero Marks : 0 In all other cases.

Section 3 of JEE Advanced 2020 Paper-1 is similar to section 3 to last year's paper but varied in terms of number of questions asked. It is a **numerical value UPTO SECOND DECIMAL PLACE** section with no partial or negative marking and full marks of +4. Compared to the single digit integer type section last year, this section can be considered more difficult. There were **six** such questions in this category, same as that of last year but there was a slight difference in marking scheme. There is no use in guessing the answer, and this type of questions very closely resembles the subjective type questions in their nature. Of a total of 66 marks, around 35% of the total weight was given to this section, numerically 24. This implies that this section deserved equal priority in terms of time consumed.

### Paper Format Analysis -Paper II

The Paper-2 of JEE Advanced 2020 was conducted from 2pm to 5pm. In terms of paper format, Paper 2 of JEE Advanced 2020 was differentfrom 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 was variation in weight age given to sections. The maximum marks achievable in this paper are 66 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: 18)

This section contains SIX (06) questions.

- The answer to each question is a SINGLE DIGIT INTEGER ranging from 0 TO 9, BOTH INCLUSIVE.
- For each question, enter the correct integer corresponding to the answer using the mouse and the on-screen virtual numeric keypad in the place designated to enter the answer.
- Answer to each question will be evaluated according to the following marking scheme:

Full Marks : +3 If ONLY the correct integer is entered;

Zero Marks : 0 If the question is unanswered;

Negative Marks : -1 In all other cases.

Section 1 of JEE Advanced 2020 Paper-2 contains 6 questions. It had questions of single integer type with full marks of +4 and negative marking of -1 on selection of wrong option regardless of selecting a correct option also. There were **six**such questions. Of a total of 66 marks, around 35% of total weight was given to this section, numerically 24. This implies that maximum time was to be devoted to this section for each subject.

#### Paper 2: Section 2

#### SECTION 2 (Maximum Marks: 24)

- This section contains SIX (06) questions.
- . Each question has FOUR options. ONE OR MORE THAN ONE of these four option(s) is(are) correct answer(s).
- For each question, choose the option(s) corresponding to (all) the correct answer(s).
- Answer to each question will be evaluated according to the following marking scheme:

Full Marks : +4 If only (all) the correct option(s) is(are) chosen;

Partial Marks : +3 If all the four options are correct but ONLY three options are chosen;

Partial Marks : +2 If three or more options are correct but ONLY two options are chosen, both of which are

correct;

Partial Marks : +1 If two or more options are correct but ONLY one option is chosen and it is a correct option;

Zero Marks : 0 If none of the options is chosen (i.e. the question is unanswered);

Negative Marks: -2 In all other cases.

Section 2 of JEE Advanced 2020 Paper-2 contains 6 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 option regardless of selecting a correct option also. There were **six** such questions in JEE Advanced 2020 section 2, while there were eight such questions in JEE Advanced 2019. 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 the total of 66 marks, around 35% of total weight was given to this section, numerically 24. This implies that maximum time was to be devoted to this section for each subject.



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#### Paper 2: Section 3

#### SECTION 3 (Maximum Marks: 24)

This section contains SIX (06) questions. The answer to each question is a NUMERICAL VALUE.

 For each question, enter the correct numerical value of the answer using the mouse and the on-screen virtual numeric keypad in the place designated to enter the answer. If the numerical value has more than two decimal places, truncate/round-off the value to TWO decimal places.

Answer to each question will be evaluated according to the following marking scheme:

Full Marks : +4 If ONLY the correct numerical value is entered;

Zero Marks : 0 In all other cases.

Section 3 of JEE Advanced 2020 Paper-2 is different from section 3 to last year's paper. It is a **numerical value UPTO SECOND DECIMAL PLACE** section with no partial or negative marking and full marks of +4. Compared to the single digit integer type section last year, this section can be considered more difficult. There were **six** such questions in this category. There is no use in guessing the answer, and this type of questions very closely resembles the subjective type questions in their nature. Of a total of 66 marks, around 35% of the total weight was given to this section, numerically 24. This implies that this section deserved equal priority in terms of time consumed.

## **Class-wise Distribution Analysis**

Following table illustrates the distribution of questions across class 11<sup>th</sup> and 12<sup>th</sup> for the three subjects. It is apparent from the numbers, class 12<sup>th</sup> had a bigger chunk of questions overall, but Chemistry subject had equal questions from class 11<sup>th</sup> topics.

Subject / Level	Physics	Chemistry	Maths	Total
11 <sup>th</sup>	21	18	10	49
12 <sup>th</sup>	15	18	26	59



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## **Overall Difficulty Analysis**

We divide the questions in 3 categories: easy, medium and difficult to analyze the overall difficulty level of the paper and come up with a selection probability analysis.

Subject / Level	Easy	Medium	Difficult	Total
Physics	9	19	8	36
Chemistry	3	24	9	36
Mathematics	4	21	11	36
Total	16	64	28	108

Mathematics and Physics can be considered difficult compared to Chemistry, which had a higher percentage of questions in the easy and medium category. Overall, our experts feel that the paper was more difficult compared to last year and hence we should expect an overall decrease in marks which will be scored by aspirants.

## Jee Advanced cutoff across years

Category / Year	2017	2018	2019	2020
General	35%	35%	35%	35%
ОВС	31.5%	31.5%	31.5%	31.5%
SC	17.5%	17.5%	17.5%	17.5%
ST	17.5%	17.5%	17.5%	17.5%

Even though the cutoff according to the brochure is the same as the one that we saw last year, the total marks for different ranks will increase as compared to last year as the total marks this year has increased from 372 to 396



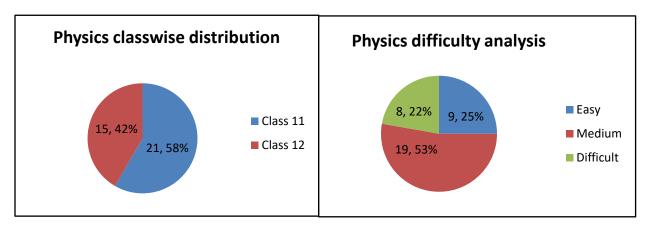
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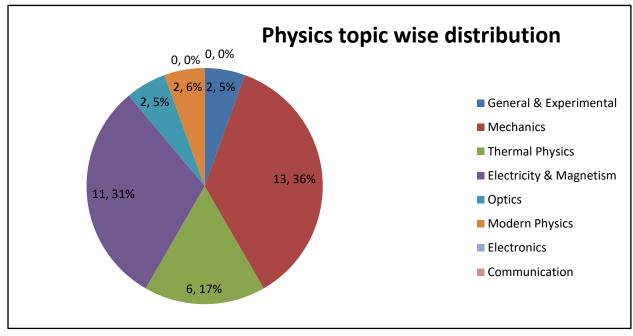


## **Subject wise analysis**

We present in the following pages a breakup of questions for each of the subjects across topics, classes and difficulty

## **Physics**







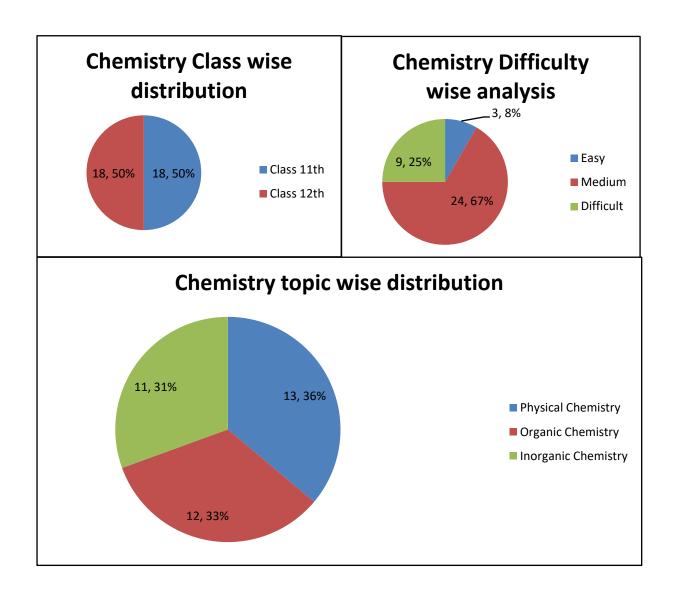
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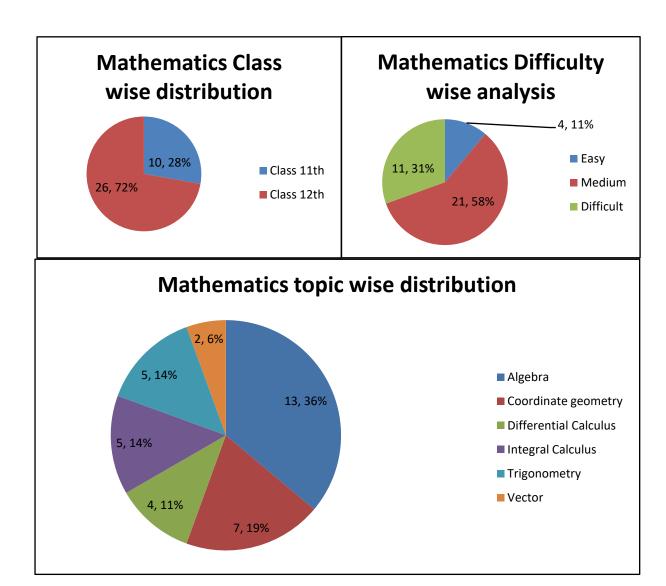


## **Chemistry**





## **Mathematics**



## रिपीटर्स बैच का सर्वश्रेष्ठ परिणाम सिर्फ मोशन के साथ JEE ADVANCED RESULT 2019



Dilendra Uikey

Karan



AIR-117

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