## CRACK JEE Deep JEE Analysis

## "You can either experience the pain of discipline or the pain of regret. The choice is yours"

JEE advanced number of appeared and seats status- last 5 years

| Stats | 2023 | 2022 | 2021 | 2020 | 2019 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Eligible | 250000 | 262175 | 260010 | 250681 | 245194 |
| Registered | 189744 | 160038 | 151209 | 160838 | 174432 |
| Appeared | 180372 | 155538 | 141699 | 150838 | NA |
| Qualified | 43773 | 40712 | 41862 | 43204 | 38705 |
| Seats | 17385 | 16598 | 16296 | 16053 | 12461 |



TYPES OF QUESTION IN JEE ADV. 2023
Numerical type 24
Multiple correct 36
Matrix Match Type 12
Integer Type 24
Single correct 12

No. of appearing Candidates: 2022 vs 2023


This Jump of 39,672 in the No. of Candidates directly affect candidates' Rank \& Percentile.

## JEE Advanced RANK vs MARKS (in percentage) : last 10 years

| Rank | 2023 | 2022 | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 90 | 87 | 97 | 89 | 93 | 94 | 93 | 86 | 84 | 87 | 86 |
| 100 | 79 | 66 | 79 | 70 | 73 | 76 | 83 | 69 | 70 | 78 | 76 |
| 500 | 67 | 53 | 66 | 59 | 61 | 65 | 76 | 55 | 60 | 69 | 67 |
| 1000 | 60 | 47 | 59 | 53 | 55 | 59 | 72 | 49 | 57 | 63 | 62 |
| 2000 | 53 | 41 | 52 | 46 | 50 | 53 | 67 | 44 | 49 | 57 | 56 |
| 3000 | 48 | 37 | 47 | 42 | 47 | 49 | 63 | 43 | 45 | 54 | 52 |
| 4000 | 45 | 34 | 43 | 39 | 44 | 46 | 60 | 38 | 43 | 51 | 49 |
| 5000 | 43 | 32 | 40 | 37 | 42 | 44 | 58 | 36 | 40 | 49 | 47 |
| 6000 | 40 | 30 | 38 | 35 | 40 | 42 | 56 | 34 | 39 | 47 | 46 |
| 7000 | 39 | 29 | 36 | 34 | 39 | 40 | 54 | 33 | 37 | 46 | 44 |
| 8000 | 38 | 28 | 34 | 32 | 37 | 39 | 52 | 32 | 36 | 44 | 43 |
| 9000 | 36 | 27 | 33 | 31 | 36 | 38 | 51 | 31 | 35 | 43 | 41 |
| 10000 | 34 | 26 | 31 | 30 | 35 | 36 | 50 | 30 | 33 | 42 | 40 |

Subject-wise difficulty level analysis: no of questions

| Subject | Easy |  | Medium |  | Difficult |  | Grand Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No of <br> Questions | Total <br> Marks | No of <br> Questions | Total <br> Marks | No of <br> Questions | Total <br> Marks | No of <br> Questions | Total <br> Marks |
| Physics | 6 | 20 | 9 | 33 | 2 | 7 | 17 | 60 |
| Chemistry | 4 | 13 | 8 | 30 | 5 | 17 | 17 | 60 |
| Mathematics | 4 | 14 | 8 | 28 | 5 | 18 | 17 | 60 |
| Grand Total | 14 | 47 | 25 | 91 | 12 | 42 | 51 | 180 |



Category-wise division of questions: last 7 years

| Types of Ques | 2022 | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Numerical type | $40 \%$ | $40 \%$ | $50 \%$ | $29 \%$ | $40 \%$ | $52 \%$ | $12 \%$ |
| Multiple Correct | $40 \%$ | $40 \%$ | $36 \%$ | $52 \%$ | $40 \%$ | $46 \%$ | $52 \%$ |
| Matrix Match type | $10 \%$ | $0 \%$ | $0 \%$ | $10 \%$ | $10 \%$ | $15 \%$ | $0 \%$ |
| Single Correct | $10 \%$ | $10 \%$ | $14 \%$ | $10 \%$ | $0 \%$ | $17 \%$ | $27 \%$ |
| Paragraph | $0 \%$ | $10 \%$ | $0 \%$ | $0 \%$ | $10 \%$ | $10 \%$ | $10 \%$ |

## MATHEMATIS

Topic-wise weightage

| Units | Algebra | Calculus | Coordinate <br> Geometry | Vector | Trigonometry | Misc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2023 | $34 \%$ | $24 \%$ | $13 \%$ | $7 \%$ | $15 \%$ | $12 \%$ |
| 2022 | $33 \%$ | $25 \%$ | $14 \%$ | $8 \%$ | $17 \%$ | $13 \%$ |
| 2021 | $39 \%$ | $29 \%$ | $18 \%$ | $5 \%$ | $8 \%$ | $0 \%$ |
| 2020 | $36 \%$ | $42 \%$ | $6 \%$ | $11 \%$ | $6 \%$ | $0 \%$ |
| 2019 | $36 \%$ | $25 \%$ | $14 \%$ | $11 \%$ | $14 \%$ | $0 \%$ |
| 2018 | $28 \%$ | $36 \%$ | $14 \%$ | $11 \%$ | $8 \%$ | $3 \%$ |
| 2017 | $28 \%$ | $42 \%$ | $17 \%$ | $8 \%$ | $6 \%$ | $0 \%$ |
| 2016 | $39 \%$ | $33 \%$ | $14 \%$ | $8 \%$ | $6 \%$ | $0 \%$ |
| 2015 | $28 \%$ | $40 \%$ | $15 \%$ | $10 \%$ | $8 \%$ | $0 \%$ |
| 2014 | $30 \%$ | $40 \%$ | $13 \%$ | $8 \%$ | $10 \%$ | $0 \%$ |
| 2013 | $28 \%$ | $28 \%$ | $18 \%$ | $18 \%$ | $8 \%$ | $3 \%$ |

## Chapter-wise weightage

| Chapter | 2022 | $\mathbf{2 0 2 1}$ | $\mathbf{2 0 2 0}$ | 2019 | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 3}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Complex Numbers | $8 \%$ | $6 \%$ | $5 \%$ | $5 \%$ | $7 \%$ | $3 \%$ | $3 \%$ | $4 \%$ | $3 \%$ | $4 \%$ |
| Definite Integration | $8 \%$ | $10 \%$ | $6 \%$ | $5 \%$ | $6 \%$ | $9 \%$ | $2 \%$ | $17 \%$ | $13 \%$ | $3 \%$ |
| Three Dimensional <br> geometery | $7 \%$ | $0 \%$ | $6 \%$ | $9 \%$ | $6 \%$ | $2 \%$ | $6 \%$ | $5 \%$ | $3 \%$ | $10 \%$ |
| Trigonometric <br> Equations | $6 \%$ | $0 \%$ | $3 \%$ | $5 \%$ | $0 \%$ | $3 \%$ | $2 \%$ | $2 \%$ | $3 \%$ | $0 \%$ |
| Differential Equations | $6 \%$ | $3 \%$ | $3 \%$ | $3 \%$ | $9 \%$ | $6 \%$ | $6 \%$ | $5 \%$ | $5 \%$ | $3 \%$ |
| Sequence and Series | $6 \%$ | $5 \%$ | $6 \%$ | $2 \%$ | $3 \%$ | $2 \%$ | $5 \%$ | $4 \%$ | $3 \%$ | $7 \%$ |
| Trigonometric Ratios <br> and Identities | $6 \%$ | $0 \%$ | $0 \%$ | $6 \%$ | $3 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| Limits | $5 \%$ | $0 \%$ | $5 \%$ | $6 \%$ | $3 \%$ | $3 \%$ | $9 \%$ | $5 \%$ | $3 \%$ | $0 \%$ |
| Permutation and <br> Combination | $5 \%$ | $3 \%$ | $6 \%$ | $2 \%$ | $5 \%$ | $2 \%$ | $2 \%$ | $2 \%$ | $13 \%$ | $0 \%$ |
| Probabilty | $5 \%$ | $13 \%$ | $8 \%$ | $8 \%$ | $5 \%$ | $6 \%$ | $7 \%$ | $7 \%$ | $35 \%$ | $10 \%$ |
| Matrices | $5 \%$ | $7 \%$ | $5 \%$ | $9 \%$ | $0 \%$ | $2 \%$ | $8 \%$ | $2 \%$ | $3 \%$ | $6 \%$ |
| Circle | $3 \%$ | $0 \%$ | $0 \%$ | $7 \%$ | $8 \%$ | $2 \%$ | $6 \%$ | $0 \%$ | $5 \%$ | $3 \%$ |
| Vector Algebra | $3 \%$ | $7 \%$ | $6 \%$ | $2 \%$ | $5 \%$ | $5 \%$ | $3 \%$ | $7 \%$ | $8 \%$ | $8 \%$ |
| Parabola | $3 \%$ | $7 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $6 \%$ | $3 \%$ | $7 \%$ | $3 \%$ | $5 \%$ |
| Straight Lines | $3 \%$ | $6 \%$ | $2 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $2 \%$ | $0 \%$ | $7 \%$ |
| Determinants | $3 \%$ | $3 \%$ | $0 \%$ | $3 \%$ | $6 \%$ | $6 \%$ | $6 \%$ | $2 \%$ | $0 \%$ | $0 \%$ |
| Ellipse | $3 \%$ | $3 \%$ | $0 \%$ | $3 \%$ | $3 \%$ | $5 \%$ | $2 \%$ | $2 \%$ | $0 \%$ | $3 \%$ |
| Hyperbola | $3 \%$ | $0 \%$ | $3 \%$ | $0 \%$ | $3 \%$ | $3 \%$ | $0 \%$ | $2 \%$ | $0 \%$ | $0 \%$ |

## Question distribution as per Class, Chapter, Topic \& Difficulty

| $\begin{array}{\|l} \hline \text { Q. } \\ \text { No } \end{array}$ | Class | Chapter | Topic | Difficulty Level | Section | Question type | Marks per Question |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 12th | Continuity and Differentiability | Continuity and Differentiability | Medium | 1 | MCQs more than one correct answer | 4 |
| 2 | 11th | Conics Section II | Common tangents to Parabola and Eclipse | Easy | 1 | MCQs more than one correct answer | 4 |
| 3 | 12th | Application of Intergrals | Area Under curve | Difficult | 1 | $\qquad$ | 4 |
| 4 | 11th | Limits \& Derivatives | Limits | Difficult | 2 | MCQs with one correct answer | 3 |
| 5 | 12th | Three Dimensional Geometry | Shortest distance between two skew lines | Medium | 2 | MCQs with one correct answer | 3 |
| 6 | 12th | Probability | Geometrical Probability | Difficult | 2 | MCQs with one correct answer | 3 |
| 7 | 11th | Conics Section II | Parabola | Easy | 2 | MCQs with one correct answer | 3 |
| 8 | 12th | Inverse Trigonometric functions | Properties of ITF | Medium | 3 | Non-negative integer type | 4 |
| 9 | 17th | Straight line | Area of triangle | Medium | 3 | Non-negative integer type | 4 |
| 10 | 11th | Sequence and series | Special series | Difficult | 3 | Non-negative integer type | 4 |
| 11 | 11th | Complex Numbers | Conjugate | Medium | 3 | Non-negative integer type | 4 |
| 12 | 12th | Three Dimensional Geometry | 3D | Difficult | 3 | Non-negative integer type | 4 |
| 13 | 12th | Binomial Theorem | FInding coefficients | Easy | 3 | Non-negative integer type | 4 |
| 14 | 12th | Matrices and Determinants | System of Equation | Medium | 4 | Match List | 3 |
| 15 | 12th | Statistics | Mean deviation | Easy | 4 | Match List | 3 |
| 16 | 12th | Three Dimensional Geometry | Perpendicular distance of a point from a plane | Medium | 4 | Match List | 3 |
| 17 | 12th | Complex Numbers | Geometry of Complex numbers | Medium | 4 | Match List | 3 |

