| Section           | Questions  |  |
|-------------------|--|--|
| Mathematics       | <ul> <li>If A+B+C = 180 degrees. Then, find tanA+tanb+tanC =? - Answer - tanA tabB tanC</li> <li>If Z<sub>1</sub> and Z<sub>2</sub> is a unimodular complex number that satisfy Z<sub>1</sub><sup>2</sup>+Z<sub>2</sub><sup>2</sup>=4. Then (Z<sub>1</sub>+Z<sub>1</sub>)<sup>2</sup>+ (Z<sub>2</sub>+Z<sub>2</sub>)<sup>2</sup> is equal to? Answer is 12</li> <li>Evaluate (e<sup>logx</sup> + sinx) cosxdx</li> <li>Area of the triangle formed by the complex number z, iz and z+iz isAns. 1/2  z <sup>2</sup></li> <li>Find the equation of the normal to the curve x<sup>2</sup> = 4y which passes through the point (1,2). Ans. x+y = 3</li> <li>No. of divisors of the form (4n + 2), of the integer 240 is - Ans. 20</li> <li>The DE representing the family of curves y<sup>2</sup> (2c + x<sup>2021</sup>) where c is the +ve parameter is of? Ans. Order 1</li> <li>Given x = cy+bx, y = az+cx, z = bx+ay where x, y and z are not all zero, then a<sup>2</sup> + b<sup>2</sup> + c<sup>2</sup> + 2ab =Ans. 1</li> <li>The minimum number of times a fair coin needs to be tossed so that the probability of getting at least two heads is at least 0.96 isAns. 8</li> <li>If x &gt; 1, y &gt; 1, z &gt; 1 are in GP, then 1 /1+lnx, 1 /1+lny, 1 /1+lnz are inAnswer - HP</li> </ul> |  |
| General Aptitude  | <ul> <li>Who was the designer of the world trade center? - Ans. Minoru Yamasaki, Emery Roth</li> <li>A person writes letters to 6 friends and addresses a corresponding envelope. The number of ways in which 5 letters can be placed in the wrong envelope is?</li> </ul>   |  |
| Drawing Questions | There was a question related to Corona Vaccination &<br>Booth (Not completely sure about questions - to be<br>updated soon)  |  |

## JEE Main 23<sup>rd</sup> Feb 2021 Shift 1 (Paper 2) Memory-Based Questions – CollegeDekho Exclusive

More questions will be added soon. If you have appeared for the exam, please share your questions on Whats App Number 9059528251.

| JEE Main 2021 Rank Predictor | What is a Good Score in JEE | JEE Main 2021 Paper 2 (B.Arch, |
|------------------------------|-----------------------------|--------------------------------|
|                              | <u>Main 2021?</u>           | <b>B.Plan) Answer Key</b>      |