

**BITSAT 6<sup>th</sup> Aug 2021 Memory-Based Questions – CollegeDekho Exclusive**

- Which instrument is used to measure inertial mass?
- Logical reasoning : 4,16,64,X,180,Y. Find X and Y (X has 2 options: 100 and 98)
- SI unit of Boltzmann's constant
- Solve the differential equation:  $x dy - y[1+\log(y/x)] = 0$ .
- $\text{KMnO}_4$  is coloured due to
- Find area btw  $y = \cos 2x$  and  $y = \sin 2x$  in  $(0 \leq x \leq \pi/4)$
- The coefficients a,b,c of equation  $ax^2+bx+c$  are in GP. Comment on nature of roots
- Integration of  $1/[x - x^2]$ . In limits 1/2 to 0
- Find the sum of all factors of 216 (including 1 and 216)
- What result did rutherford obtain throu his experiment (related to nucleus and electrons)