

No. IASST/ 920 (P)/2022-23/ 14 364.

Dated:22/12/2022

To

Ms. Tanushree
C/O: T.N.JAISWAL, PUNAICHAK (OPP: BALDEO BHAWAN)
Patna, Pin: 800023
Email: aamisumitanu@gmail.com
Ph. No: 8789781188

Sub: Information under Right to information Act 2005.

Ref: Your RTI registration no. IASST/R/E/22/00015 dt.17/12/2022

With reference to the above, the requisite information is furnished as below:

When an iron rod starts rusting, the surface of the rod is being attacked by ambient air/moisture. The reaction results in the oxidation of iron to form rust. Rust is a compound of iron with the rough formula $Fe_2O_3 \cdot nH_2O$. Rust is a solid, and will stick on to the iron rod unless it is scrapped off. Clearly, the mass of the iron rod will increase upon the formation of rust on the surface, because of the increased mass of $Fe_2O_3 \cdot nH_2O$ over Fe, by roughly 60%, assuming $n=1$ in the formula of rust.

Therefore, mass of the iron rod will increase due to the formation of rust and will decrease only when it is scrapped off.



Central Public Information Officer
IASST, Paschim Boragaon,
Guwahati-35.