

A MATHEMATICAL STUDY ON FEW EARLY COVID 19 WAVES IN WEST BENGAL

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A comparative study of different COVID 19 waves has been presented with the help of a heterogeneous SIR (Susceptible- Infected-Recovered) model on West Bengal. The estimated parameters of the model also help us to study the nature of the infections in different waves. Our study shows that the 3rd wave is much infectious in comparison to other waves, as per the computed R_0 values and the fatality of the first wave is much higher in comparison to other waves. The study shows that the devastating nature of the disease has curved to some extent due to the weakening of the variants of SARS-CoV2 and the gradual development of immunity against the diseases.
