In this paper, a mathematical model based on SIR (susceptible-Infected-Removed) model has been developed to study various parameters related to infectious diseases in Kharghuli and Hengrabari area of Guwahati city of Assam, India where an outbreaks of chicken pox occur during April 2017. From the modeling, the basic reproductive ratio for chicken pox is found to be less than unity. This modeling will help to predict the disease spreading as well as to take preventing measure of disease treatment in various locality of Assam, India.

References

3. Jenkins, David M. 2015. AN Examination of Mathematical Models for Infectious Disease, University of Akron: Ohio’s polytechnic university, Honors Research Projects.


**Index Terms**

Computer Science  Information Sciences

**Keywords**

Mathematical model, Infectious disease, Parameters Ratio