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## Effectiveness of ICT in Teaching and Learning in Secondary School with respect to School Teachers in Pune District Area, using Evolutionary Algorithm Based Technique

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### Abstract:

The study investigated effectiveness of Information and Communication Technology (ICT) in teaching and learning in Secondary schools in Pune district area of Maharashtra State. A sample size of 236 School Teachers was used for the study. Simple random sampling technique was used to compose the sample. To measure the effectiveness, researcher used three research questions were answered. Questionnaire method used for data collection, it was objectively used to investigate the utilization of ICT tools, how ICT tools are used to evaluate teaching learning process and the constraint to effective utilization of ICT tools by Teachers. The study attempts to fit a classification, recursive partitioning and regression trees i.e. CART method also chi-square test is used. "The decision tree method is a powerful and popular predictive machine learning technique that is used for both classification and regression" [1]. This method known as Classification and Regression Tree (CART) [2]. Also, researcher use a Chi-Square statically analysis was done to find the difference between area wise data from the schools. The R Software implementation is carried out for this study, this implementation of the CART algorithm is called RPART (Recursive Partitioning And Regression Trees). "Here researcher use R software coding to compute and process classification and regression trees." [3] It was found that ICT tools were not fully utilized in the school. Based on the findings, it was recommended among others that the government of Maharashtra should embark on a massive computer literacy training programme state wide particularly for the teachers at all level of education.

**Keywords:** Information Communication Technology (ICT), Effectiveness, Information Technology (IT), Computer, Internet and Multimedia.

### 1. Introduction:

Information Communication Technology (ICT) is to align with the global best practices, with this ICT occupied a central stage in the senior secondary school curriculum in order to presents the total experiences to which all teachers must exposed and through which the content and performance

