

LIST OF TABLES

Table 1.1. Comparison between Fiber optic sensors and Conventional sensors.....	12
Table 4.1. Samples and symbols.....	59
Table 5.1. Signature of ANOVA test corresponding to different loads.	73
Table 5.2. ANOVA analysis under different loading.	83
Table 5.3 Parameters used in the development of neural network model.....	85
Table 5.4. Performance effectiveness of neural network model at different loads	89
Table 5.5. Data set for different k-folds.....	91
Table 5.6. Performance effectiveness of neural network model at different loads	94
Table 5.7. Comparison of Actual and ANN prediction with percentage error comparison	94
Table 6.1. Performance effectiveness of neural network model at different loads	104