**DOCUMENT CONTROL SHEET**

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| 1 | Report No: | CA/MCA/Mini Project/GP/GR7/2019 |
| 2 | Title of the Report: | Data Mining on Diabetes Detection |
| 3 | Type of Report: | Research |
| 4 | Author(s): | Aditya Pradhan (202222017)  Asha Kumari (202222018) Rupak Upadhyay (202222020) |
| 5 | Organizing Unit: | SMIT |
| 6 | Language of the Document: | English |
| 7 | Abstract: | The study aimed to address the challenges of obtaining high accuracy in detecting diabetes while keeping the complexity of the machine-learning model low. The study also proposed a solution to the challenge i.e., is to utilize five feature selection algorithms and six classification algorithms to detect Type 2 diabetes. Support Vector Machine with features obtained from Forward Stagewise Selection achieved the highest accuracy of 91.5582% in 10-fold cross-validation This study contributes to the development of efficient tools for detection of diabetes, focusing on simplicity for broader accessibility |
| 8 | Security Classification: | General |
| 9 | Distribution Statement: | General |