Trimester: May 2021 - July 2021 **Examination: Practical Examination**		
Programme code:09 **Programme: MCA**	**Class:** FY	**Trimester:** III **(SVU 2021)**
Name of the Constituent College: **K. J. Somaiya Institute of Management**	**Name of the** **department/Section/Center:** DST	
Course Code: 117P05L301	**Name of the Course: Artificial Intelligence and Machine Learning Lab**	
Time: 3 hrs		**Marks: 30**

Instructions:

- *Viva will be taken at the time of practical as well as after the practical if required.*
- *The figures to the right indicate full marks.*
- *Dataset is provided separately.*

Q1. Develop a model to determine which seed lots in a species are best for soil conservation in seasonally dry hill country using eucalyptus.csv.   **[30]**

1. Analyse the Data Visually.

2. Find limitation with data if any in developing the model.

3. Develop a prediction model for quality of the seed lots using decision tree classifier.

4. Compare the performance with support vector machines and naïve Bayes Classifier.

5. Apply dimensionality reduction techniques.

6. Perform hyper parameter tuning and compare the performance.