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# **SATISH PRADHAN DNYANASADHANA COLLEGE, THANE**

(Arts, Science and Commerce)

Re-Accredited “B+” Grade (CGPA 2.69) by NAAC, ISO 21001:2018 (Certified)

*(Affiliated To University of Mumbai)*

## **CERTIFICATE**

This is to certify that **Mr.: Pranav Anil Taware** of TY. BSc Computer Science (Semester-V) Class has successfully completed all the practical work in subject **Artificial Intelligence** under the guidance of **Asst Prof. Dnyaneshwar Deore** (subject in charge) during Year 2024-25 in partial fulfilment of Computer Science

Practical Examination conducted by University of Mumbai.

\_\_\_\_\_  
Subject Incharge

\_\_\_\_\_  
Head of Department

Date: - \_\_\_\_\_

\_\_\_\_\_  
External Incharge

<b>SATISH PRADHAN DNYANASADHANA COLLEGE, THANE [A.Y. 2024-25]</b>	
<b>Name: Pranav Anil Taware</b>	<b>Std: TY. B.Sc. Computer Science</b>
<b>Subject: Artificial Intelligence- Practical</b>	<b>Roll no.: 86, Batch: B, Div: B</b>

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1.	<b>Breadth First Search &amp; Iterative Depth First Search ..</b> <ul style="list-style-type: none"> <li>Implement the Breadth First Search algorithm to solve a given problem.</li> <li>Implement the Iterative Depth First Search algorithm to solve the same problem.</li> </ul>	10-07-2024	1-2	
2.	<b>A* Search and Recursive Best-First Search :-</b> <ul style="list-style-type: none"> <li>Implement the A* Search algorithm for solving a pathfinding problem.</li> <li>Implement the Recursive Best-First Search algorithm for the same problem.</li> </ul>	24-07-2024	3-5	
3.	<b>Decision Tree Learning :</b> <ul style="list-style-type: none"> <li>Implement the Decision Tree Learning algorithm to build a decision tree for a given dataset.</li> <li>Evaluate the accuracy and effectiveness of the decision tree on test data.</li> <li>Visualize and interpret the generated decision tree.</li> </ul>	31-07-2024	6-11	
4.	<b>Feed Forward Back Propagation Neural Network</b> <ul style="list-style-type: none"> <li>Implement the Feed Forward Back Propagation algorithm to train a neural network.</li> <li>Use a given dataset to train the neural network for a specific task.</li> </ul>	07-08-2024	12-13	
5.	<b>Support Vector Machines (SVM)</b> <ul style="list-style-type: none"> <li>Implement the SVM algorithm for binary classification.</li> <li>Train an SVM model using a given dataset and optimize its parameters.</li> <li>Evaluate the performance of the SVM model on test data and analyse the results.</li> </ul>	21-08-2024	14-20	

6.	<b>Ad boost Ensemble Learning</b> <ul style="list-style-type: none"> <li>Implement the Adaboost algorithm to create an ensemble of weak classifiers.</li> <li>Train the ensemble model on a given dataset and evaluate its performance.</li> <li>Compare the results with individual weak classifiers.</li> </ul>	28-08-2024	21	
7.	<b>Naive Bayes' Classifier</b> <ul style="list-style-type: none"> <li>Implement the Naive Bayes' algorithm for classification.</li> <li>Train a Naive Bayes' model using a given dataset and calculate class probabilities.</li> <li>Evaluate the accuracy of the model on test data and analyse the results.</li> </ul>	04-09-2024	22-32	
8.	<b>Implement the K-NN Algorithm for classification or regression.</b> Apply K-NN Algorithm on the given dataset & predict the class or value for test data.	18-09-2024	33-37	
9.	<b>Association Rule Mining</b> <ul style="list-style-type: none"> <li>Implement the Association Rule Mining algorithm (e.g., Apriori) to find frequent itemsets.</li> <li>Generate association rules from the frequent itemsets and calculate their support and confidence.</li> <li>Interpret and analyze the discovered association rules.</li> </ul>	25-09-2024	38-46	

