

Daffodil International University

Faculty Of Science & Information Technology

Department Of Computer Science & Engineering

Course Code: CSE 432

Course Title: NLP

QUIZ 1, FALL 2026

Time: 40 min

QUIZ 1, Fall 2026

1.	<table><tr><th>Doc</th><th>Text</th><th>Class</th></tr><tr><td>D1</td><td>"python code algorithm data"</td><td>Technology</td></tr><tr><td>D2</td><td>"neural network deep learning model"</td><td>Technology</td></tr><tr><td>D3</td><td>"cricket bat ball wicket match"</td><td>Sports</td></tr><tr><td>D4</td><td>"football goal player stadium win"</td><td>Sports</td></tr><tr><td>D5</td><td>"rice curry spice cook delicious"</td><td>Food</td></tr><tr><td>D6</td><td>"cake sugar butter bake oven"</td><td>Food</td></tr></table> Test Document: "<i>python data butter cook</i>" (a) Calculate the Prior Probabilities. (b) Calculate the Likelihood of each word in the test document for a classes using Laplace Smoothing. (c) Which class does the classifier assign to the test document?	Doc	Text	Class	D1	"python code algorithm data"	Technology	D2	"neural network deep learning model"	Technology	D3	"cricket bat ball wicket match"	Sports	D4	"football goal player stadium win"	Sports	D5	"rice curry spice cook delicious"	Food	D6	"cake sugar butter bake oven"	Food	7
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	D4 birds fly in the sky (a) Compute the IDF of the terms “the”, “cat”, and “sky”. (b) Which of these three terms is the most informative for distinguishing documents, and why?	
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