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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

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1. 7

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

Test Document: ***" python data butter cook"***

(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?

2. 3

Doc	Text
D1	the cat sat on the mat
D2	the dog sat on the log
D3	the cat chased the dog

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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?