Roll No: | | | | | | | | | | | |

PRESIDENCY UNIVERSITY

GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

Presidency University Act, 2013 of the Karnataka Act No. 41 of 2013 | Established under Section 2(f) of UGC Act, 1956
Approved by AICTE, New Delhi | Approved By BCI
Bengaluru

Mid Term Examinations - October 2026

Date: 05/10/2026 **Time:** 11:45 AM - 01:15 PM

Course Code: CSE3504 **Course Name:** Computational Linguistics and Natural Language Pro

Semester: Seventh Semester **Max. Marks:** 50 **Weightage:** 50%

CO - Levels	CO1	CO2
Marks	50	40

PART A: Answer Following Questions. 10 M

Q.N.	Questions	M	CO	BT
1	1/|T| **2 marks**	2	CO1	BT1
2	$(e^{x} - e^{-x})/(e^{x} + e^{-x})$ **2 marks**	2	CO1	BT1
3	k-1 **2 marks**	2	CO1	BT1
4	Histogram Intersection String Kernel **2 marks**	2	CO1	BT1
5	0.5 **2 marks**	2	CO1	BT1

PART B : Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
6		10	CO2	BT3
7	TODO	10	CO2	BT3

PART C: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
8	**Marking Scheme:** **2 marks** for calculation of priors **5 marks** for calculation fo the likelihoods **2 marks** for calculation of the Naive Bayes scores **1 mark** for the overall classification.	10	CO1	BT2
9	a) Y = x1 OR x2 b) Y = x1 AND x2 **Marking Scheme:** **5 marks** for each, totally **10 marks**	10	CO1	BT2

PART D: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT

ANSWER KEY

10	**Accuracy =** (a + e + i) / (a + b + c + d + e + f + g + h + i) **Precision(C1) =** a / (a + b + c) **Precision(C2) =** e / (d + e + f) **Precision(C3) =** i / (g + h + i) **Recall(C1) =** a / (a + d + g) **Recall(C2) =** e / (b + e + h) **Recall(C3) =** i / (c + f + i) **F1Score(C1) =** 2a / (2a + b + c + d + g) **F1Score(C2) =** 2e / (b + d + 2e + f + h) **F1Score(C3) =** 2i / (c + e + g + h + 2i) **Marking Scheme:** **1 mark** for each (totally **10 marks**). NOTE: In case students don't simplify the F1 scores **1 mark in total** may be cut. Similarly, if students **interchange** Precision and Recall, **1 mark in total** may be cut.	10	CO2	BT2
11	a = N b = log10(N) If N = 10000, a = 10000, b = 4 **Marking Scheme:** **4 marks** for expressing a **4 marks** for expressing b **1 mark** for finding a **1 mark** for finding b	10	CO2	BT2

PART E: Answer Any 1 Following Questions. 10 M				
Q.N.	**Questions**	**M**	**CO**	**BT**
12	1 H 2 C 3 B 4 G 5 D 6 J 7 E 8 A 9 F 10 I **Marking Scheme:** **1 mark** for each correct association. Totally **10 marks**	10	CO1	BT2
13	Table should be given for marks.	10	CO1	BT2

ANSWER KEY