

NLP quiz 3, 10 marks , 15 min

Name:

Roll:

Docs in test set	Assigned UK	Assigned poultry	Assigned wheat	Assigned coffee
True UK	95	1	13	0
True poultry	0	1	0	0
True wheat	10	90	0	1
True coffee	0	0	0	34

Calculate the following (Q1 , Q2) based on the above confusion matrix: [2+2 marks]

1) Macro Avg precision of “UK and Wheat”

2) Micro Avg recall of “poultry and coffee”

Question 2) Calculate the F score for the following confusion matrix with respect to class 2:
Consider, $\beta = 1$ [2 marks]

	Actual Class 1	Actual Class 2
Predicted Class 1	15	5
Predicted Class 2	4	26

[4 marks]

Question 3) Given the following statistics, what is the probability that a woman has cancer if she has a positive mammogram result?

- One percent of women over 50 have breast cancer.
- Ninety percent of women who have breast cancer test positive on mammograms.
- Eight percent of women will have false positives.

