



Course: Information Retrieval
 Program: BS (Computer Sc)
 Section: BCS-I
 Assessment: QUIZ - 4

Course Code: CS4051
 Semester: Spring 2022
 Total Marks: 20

Instruction/Notes:

Q1) How does stemming typically affect recall? Why?

(3)

Recall is $\frac{a}{a+b}$ where 'a' means TP, relevant retrieved and 'b' means relevant rejected. When we do the stemming, the recall will increase because once we do the stemming on words more and more documents will be retrieved resulting in increase of recall.

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Q2) The table below shows how precision changes for the ranked documents returned for some query. For each of the document suggest if the user found it relevant or not.

(5)

Precision	Relevant (Yes/No)
1	Yes ✓
0.5	NO ✓
0.66	Yes ✓
0.5	NO ✓
0.4	NO ✓

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Q3) A user enters a query and gets the ranked documents as shown in the table below, he then gives his feedback on which document he found relevant, calculate precision and recall of this system. Assume total relevant documents are 10.
(20)

(10)

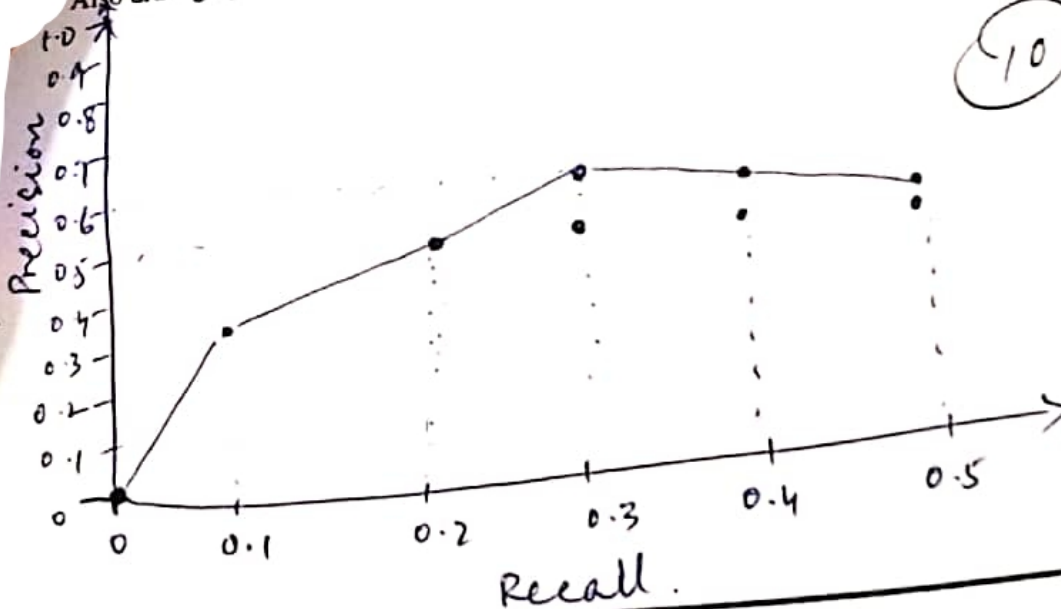
a) Fill the table below.

Document	Relevance	Precision	Recall
D4	-	0	0
D3	-	0	0
D5	+	1/3	1/10
D6	+	2/4	2/10
D1	+	3/5	3/10
D2	-	3/6	3/10
	+	4/7	4/10
	-	4/8	4/10
	+	5/9	5/10
	-	5/10	5/10

10

(10)

Also draw graph of ~~Accuracy~~ precision against recall.



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