CE306 or CE706 - Information Retrieval 2023

Assignment 2

2202396

Pooling (Task 1)

Doc	Judgment	Reason
1.	Irrelevant	Not part of top 5 documents in pool so discarded
2.	Irrelevant	Not part of top 5 documents in pool so discarded
3.	Irrelevant	Not part of top 5 documents in pool so discarded
4.	Irrelevant	Not part of top 5 documents in pool so discarded
5.	Irrelevant	Not part of top 5 documents in pool so discarded
6.	Irrelevant	Not part of top 5 documents in pool so discarded
7.	Relevant:	This document has the information on timetables of graduation, which is part of original query, this document is also part of the pool of 5 documents.
8.	Relevant	The information on the graduation ceremony and other things like tickets is on this document which makes it relevant to the asked query. This document is also part of the pool of 5 documents.
9.	Irrelevant	This document doesn't provide direct information about the graduation at the university campus, which Is the original query, so it is irrelevant. This document is also part of the pool of 5 documents.
10.	Irrelevant	Not part of top 5 documents in pool so discarded
11.	Irrelevant	Not part of top 5 documents in pool so discarded
12.	Irrelevant	Not part of top 5 documents in pool so discarded
13.	Relevant	The query involves reaching the campus, and this document gives you information on means of transportation which makes this document directly relevant. This document is also part of the pool of 5 documents.
14.	Irrelevant	
15.	Partially Relevant	This document is subjective as it states about days the university is open but doesn't have direct information on the graduation ceremony. This document is also part of the pool of 5 documents.

P/R@5 (Task 2)

Systems	P@5	R@5
IR1:	4/5 = 0.8	4/6 = 0.67
IR2:	2/5 = 0.4	2/6 = 0.33
IR3:	2/5 = 0.4	2/5 = 0.4

Average Precision (Task 3)

Systems	Average Precision
IR1:	*(1.0 + 0.57 + 0.5 + 0.45 + 0.33) / 5 = 0.57*
IR2:	*(1.0 + 0.67 + 0.5 + 0.5 + 0.56 + 0.54 + 0.58) / 5 = 0.476*
IR3:	*(0.5 + 0.67 + 0.43 + 0.33 + 0.36) / 5 = 0.46*

Discounted Cumulative Gain (Task 4)

Systems	Discounted Cumulative Gain
IR1:	$1 + 0 + (1/\log2(3)) + (1/\log2(4)) + (1/\log2(5)) + (1/\log2(6)) + 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 = 3.471$
IR2:	$1 + 0 + (1/\log2(3)) + (1/\log2(4)) + 0 + 0 + 0 + (1/\log2(8)) + 0 + 0 + 0 + 0 + 0 + 0 + 0 = 2.285$
IR3:	$1 + 0 + 1/\log2(3) + 0 + 1/\log2(5) + 1/\log2(8) + 1/\log2(9) + 0 + 0 + 0 + 0 + 0 + 0 = 2.198$