

Indian Statistical Institute
Documentation Research and Training Centre

M.S. in Library and Information Science
Semester IV, Mid-Term Exam (AY 2024-25)

Paper 16 – Scientometrics and Informetrics

Date: 18.02.2025

Max. Marks: 40
Time: 11:30am-1:00pm

Answer any 3 complete questions [1-4].

10X3=30 Marks

1. Investigate the essence of Bradford's law to establish relationship between journals and their contributing articles in a domain. Prove the Bradford's law by suitable plots and assumptions
2. Differentiate between Citing half-life and Cited half-life of journal in a particular domain by quoting suitable examples.
3. Explore the terms – Librametrics, Bibliometrics, Webometrics, Cybermetrics and Scientometrics. Provide suitable explanations of each
4. State the Zipf's law and explore its significance with respect to the occurrence of words in a corpus and its rank and frequency

Answer any one question [6 or 7]

10X1 =10 marks

1. Fill in the columns in the table below to prove the Bradford's law. Find the value of the Bradford's multiplier for journal's data given in the table.

No. of Journals	Cum. no. Journals	Log (n)	Publications	Total no. of Publications	Cum. No. of Publications
1			463		
1			80		
1			47		
1			43		
1			40		
1			35		
1			34		
4			29		
1			28		
1			27		
1			26		

2. What is co-citation analysis, and how does it assist in understanding the relationships between academic articles or authors? What is bibliometric coupling, and how does it differ from co-citation analysis in citation research?

1					
2					
1					
1					
20					
19					
17					
16					
6					
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7					
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9					
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6					
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4					
12					
11					
10					
9					
6					
142					
391					
1					