2019

M.LIB.I.Sc.

2nd Semester Examination STUDIES OF ACADEMIC METRICS

Paper - MLI 207

Full Marks: 40

Time: 2 Hours

The figures in the margin indicate full marks.

1. Answer any four questions:

2×4

- (a) What is in index?
- (b) Define co-citation coupling.
- (c) Define immediacy index of a journal.
- (d) What is cited half-life of a journal?
- (e) Who coined the term 'Informetrics' and when?
- (f) Give examples of some academic social networks.
- (g) State B.K. Sen's equation of Normalised Impact Factor.
- (h) Define author self citation and journal self citation.

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)	Answer any	four	questions	•
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 4×4

- (a) Explain Bradford's law of bibliographic scattering. What is Sengupta's correction in this context?
- (b) Define two-year journal impact factor. What is bibliographic coupling?
- (c) Explain Lotka's law of author productivity. Discuss the nature of function descirbed in this law.
- (d) What is Benford's law? State two limitations of citation analysis.
- (e) Define SJR rank and RG score. What is the difference between these two parameters?
- (f) Explain how Stigler's law of eponymy contradicts Price's Little Science Big Science' concept.
- (g) Define h-index. Do you think h-index is a complete indicator? Justify your answer.
- (h) Explain power model and logistic model of growth of literature.

3. Answer any two questions:

8×2

- (a) Define Altmetrics. Describe different components of Altmetric score. State two major advantages of Altmetric score.
- (b) Distinguish among librametry, bibliometrics, informetrics, scientometrics and webometrics. What is patentometrics? Name two institutions in

India involved with advanced study and research in scientometrics.

(c) Data given below show the rank of published papers and number of citations received by an author. Claculate total citations, h-core excess citations, overall excess citations and tail citations.

Then find out the following indicators:

i. h-index

ii. i-10 index

iii. g-index

iv. e-index

v. a-index

vi. R-index

Rank of papers	No of citations received	
1	25	
2	17	
3	11	
4	9	
5	8	
6	8	
. 7	7	

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(4)				
8	7			
9	6			
10	5			
11	5			
12	5			
13	4			
14	4			
15	4			
16	3			
17	3			
18	3			
19	2			
20	2			
21	2			
22	2			
23	1			
24	1			
25	1			
26	1			
27	1			
28	1			
29	1			
30	1			

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(d) Explain how the subject bibliometrics or scientometrics originated from sociology of science. Describe with illustration, different stages of life cycle of science disciplines with respect to price's logistic growth curve.