Second Year- Semester IV — Feb. 2026

Paper 15: Scientometrics and Informetrics

Part A

Answer Any Ten questions. — 10 X 1 = 10 marks

1. Scientometrics denotes

A. Quantitative studies
B. Interdisciplinary nature of research and use of statistical tools
C. Handling large volumes of data and the heterogeneous nature of disciplines
D. All the above

2. Which of the following statements is incorrect?
Scholarly Communication

A. Produce scholarly writings
B. Manage research data
C. Manage research Projects
D. Archive scientific publications

3. Exporting data from one file to another file/format requires

A. Field Mapping
B. Uniform fields/tags in both source and export file
C. Facility in the database
D. All the above

4. Word analysis and relations are studied in

A. Scientometrics
B. Natural Language Processing
C. Text Analysis
D. All the above

5. Which of the following statements is incorrect?

A. Citation practices vary among fields
B. Citations are not given to tertiary sources such as abstracts and indexes
C. Citation analysis fails to measure the current impact of a scholarly paper
D. Citing to hot papers is mandatory in fast growing domains

6. Unequal distribution is studied in

1 - D
2 - C
3 - D
4 - D
5 - D
6 - D
7 - D
8 - A
9 - B
10 - C
11 - D
12 - C

A. Lotka and Paretto
B. Bradford and De Solla Price
C. Zip'f and De Solla Price
D. All the above

7. The common feature in Bibliometrics, Scientometrics and Informetrics is

A. Quantitative study
B. Data, Scientific Contribution, and Variables
C. Textual Analysis
D. All the above

8. Scholarly communication is/has

A. Formal and Informal
B. No clear structure
C. Completely documented
D. High obsolescence

9. Metrics in Scientometrics are used to measure

A. General Communication
B. Scholarly Communication
C. Formal Communication
D. All the above

10. Which of the below statement is most accurate and acceptable?

A. Text Analysis reveals the academic and scholarly impact of scientific publications
B. Text analysis is possible using only open sources
C. There is a strong correlation between text indicators and the quality of scientific literature
D. Peer review is both a bibliometric and scientometric unit of analysis.

11. Classical bibliometric laws

A. Denote uneven distribution
B. Denote uneven productivity
C. Denote uneven information consumption
D. All the above

12. Information Growth is measured by

A. Publications and Citations
B. Publications and Information Use
C. Citations and Information Use
D. All the above

PART B **5 X 2 = 10 marks**

Answer any five of the following (in three to four sentences)

1. Mention a few limitations/shortcomings of the use of citations as a measure.
2. Make a brief comparative study of Bibliometrics, Scientometrics and Informetrics
3. Write a note on uneven distribution.
4. What is a preprint? What are their features?
5. How do co-citations differ from bibliographic coupling?
6. Briefly discuss the types of research collaboration.
7. Write a note on Normalisation
8. Write a note on 'metadata' in citation indexes.

Part C **5 X 4 = 20 marks**

Answer any five of the following. (200 to 250 words)

1. Discuss the role of citations in scientific literature as a tool for evaluation and an aid for information retrieval
2. What are the benefits of research collaboration? How is the research collaboration initiated?
3. Write a detailed note on Citation Indexes
4. Discuss some of the major citation-based (specific) indicators.
5. Write a detailed note on research assessment practices.
6. What is a science audit? How science evaluation enables to assess scientific contributions?
7. Discuss the inequality and skewness in science.

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