

**MASTER OF LIBRARY AND
INFORMATION SCIENCE (Revised)**

Term-End Examination

June, 2006

**MLIE-105 : INFORMETRICS AND
SCIENTOMETRICS**

Time : 3 hours

Maximum Marks : 100

Note : *Attempt **all** questions. All questions carry equal marks. Illustrate your answers with suitable examples and diagrams, wherever necessary. Write relevant question number before writing the answer.*

1.1 What is meant by the term 'Measurement' ? Explain the pre-conditions of effective measurement.

OR

1.2 Define 'Informetrics'. Describe its usefulness in different areas of information communication, information systems and services.

2.1 State Bradford's law of scattering and explain its implication in the development and managing of periodical collection of a library.

OR

2.2 Explain the scope of the field of informetrics studies. What are the various sub-fields of this area ?

3.1 (a) What is meant by scientific productivity of authors ? Discuss the contribution of Alfred J. Lotka in this field.

(b) Calculate the Mean, Median and Mode measures of central tendency of the numbers 2, 4, 7 and 12.

OR

3.2 Explain the concept of obsolescence of literature and its pattern of occurrence. Describe the methods used by librarians for measurement of obsolescence of literature.

4.1 Enumerate different methods of graphical representation of a set of numbers. Explain the features of any two of them.

OR

4.2 Enumerate the common techniques of analysing multi-dimensional data. Explain the concept of factor analysis and its types.

5.0 Write short notes on any **three** of the following (in about 300 words each) :

- (a) Properties of informativeness
- (b) Approaches to sociology of science
- (c) Measures of growth
- (d) Garfield's method of cito-analytical studies
- (e) Citation based indicators