

**2017**

**MLISc**

**2nd Semester Examination**

**STUDIES OF ACADEMIC METRICS**

**PAPER—MLI-207**

*Full Marks : 40*

*Time : 2 Hours*

*The figures in the right-hand margin indicate full marks.*

*Answer all questions.*

1. Define any *five* of the following : 5×2
- (a) 2-year Journal Impact Factor.
  - (b) Cited half-life.
  - (c) h-index.
  - (d) Cite SeerX.
  - (e) i-10 index.
  - (f) Zipf's law.
  - (g) Librametry.
2. (a) Explain Bradford's law of bibliographic scattering.
- (b) Describe Brook's interpretation of Bradford's law and state Leimkuhler's equation.

*(Turn Over)*

(c) Explain Lotka's law of author productivity. 5+5+5

Or

(a) Explain Bookstein's equation.

(b) Derive three fundamental bibliometric laws from Bookstein's equation.

(c) State Sengupta's Correction to Bradford's law.

(d) State Garfield's law of concentration. 3+6+3+3

3. (a) State Matthew Effect in Science.

(b) Describe Merton's contribution to the development of sociology of science.

(c) State Pareto's 80/20 principle.

(d) Briefly explain De Solla Price concept of "Little Science" and "Big Science". 3+5+3+4

Or

(a) Describe with illustration De Solla Price model of growth of literature.

(b) Explain how the concept of interdisciplinary and multidisciplinary subjects may be interpreted through this model.

(c) Compare between Power model and exponential model of growth of literature. 5+5+5