

( 2 )

Ex./MLDL/6.4/22/2018

(e) How do you calculate the 'degrees of freedom' and 'expected frequency of a cell' in a contingency table.

2

**MASTER OF LIBRARY & INFORMATION SCIENCE  
(DIGITAL LIBRARY) EXAMINATION, 2018**

(4th Semester)

**Quantitative Methods**

**Paper - MLDL - 6.4**

Time : Two hours

Full Marks : 40

2A. Describe briefly the meaning and scope of the following terms : 5x3=15

(a) Informetrics (ii) Webometrics (c) Altmetrica.

**OR**

2B. (a) Define the term 'Operations Reserch'(OR 3

(b) Give a brief history about the development of the subject. 3

(c) Mention three Or techniques which could be applied to library environment. 3

(d) Discuss in brief the scientific methods involved in OR. 6

3. Write short notes on any *two* of the following : 5x2

(a) Characteristic features of Mean, Median and Mode

(b) Ambiguity in Bradford's law

(c) Citation analysis

(d) Scatter diagram

Answer *all* questions.

1A. (a) Describe briefly the different ways of measuring dispersion. 6

(b) The price distribution of a sample of books is as follows :

Price(Rs.)	1-5	6-10	11-15	16-20	21-25	26-30
No. of Books	7	12	19	15	8	3

Calculate the mean deviation of the above distribution. 9

**OR**

1B. (a) Write the expressions of Z for sample, population and sampling distribtion of means. 3

(b) Mention the factors on which sample's biasness depends. 2

(c) Differentiate between Parametric and Non-Parametric tests. 2

(d) Show with a diagram the respective positions of Null hypothesis. Alternative hypothesis, and indecisive zone and mention the conditions they fulfil. 6