

2005

(December)

LIBRARY AND INFORMATION SCIENCE

(**Research Methodology**)

Course No. : 304

Full Marks : 75

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

Answer **five** questions, selecting **one** from each Unit

UNIT—I

1. What do you understand by 'Research Design'? Explain various types of research design, giving suitable examples. 15
2. How would you design a research proposal? Explain, in detail, various steps involved in designing a research proposal. 15

UNIT—II

3. Discuss the operation of 'Scientific Method' of research, highlighting the major steps involved in conducting research by this method. 15

4. Show your familiarity with various 'Data Collection Tools and Techniques', highlighting the merits and demerits thereof. 15

UNIT—III

5. Define 'Bibliometrics'. Explain 'Lotka's law' and 'Bradford's law' in brief. 15
6. What do you mean by 'Citation Analysis'? Discuss its objectives and practical utilities. 15

UNIT—IV

7. Write an essay on 'Data Analysis and Interpretation'. 15
8. What do you understand by Measures of Dispersion? Using the following data, find out the value of Mean and Standard Deviation :

$$5+5+5=15$$

<i>Class Interval</i>	<i>Frequency</i>
60-64	1
55-59	3
50-54	5
45-49	7
40-44	10
35-39	8
30-34	3
25-29	2
20-24	1

$$N = 40$$

UNIT—V

9. Write short notes on any *two* of the following :

$7\frac{1}{2} \times 2 = 15$

- (a) Identification of research problem
- (b) Historical method of research
- (c) Co-citation coupling
- (d) Statistical packages

10. Discuss briefly any *two* of the following :

$7\frac{1}{2} \times 2 = 15$

- (a) Survey method of research
- (b) Bibliographic coupling
- (c) Chi-square test
- (d) Pie-line graphs

2006

(December)

LIBRARY AND INFORMATION SCIENCE

(**Research Methodology**)

Course No. : 304

Full Marks : 75

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

Answer **five** questions, selecting **one**
from each Unit

UNIT—I

1. Explain the term 'Research Design'. How a problem is identified for undertaking a research? Discuss in detail. 15

2. Discuss the steps involved in designing a major research proposal in the field of Library and Information Science. 15

UNIT—II

3. Highlight the merits and demerits of 'Survey Method' and 'Case Study' for doing research. 15
4. Differentiate between 'Questionnaire' and 'Interview Schedule' as tools for data collection. 15

UNIT—III

5. Discuss the 'Zipf's Law' and 'Lotka's Law', in brief. 15
6. What is the difference between 'Cocitation Coupling' and 'Bibliographic Coupling'? Discuss with suitable examples. 15

UNIT—IV

7. Show your familiarity with Mean, Mode and Median for data analysis and interpretation. 15
8. Discuss 'Pie-Line Graphs' and 'Histograms', giving appropriate illustrations. 15

UNIT—V

9. Write short notes on any *two* of the following : 7½×2=15

- (a) Types of research design
- (b) Historical method of research
- (c) Bradford's law
- (d) Variance and covariance

10. Discuss briefly on any *two* of the following : 7½×2=15

- (a) Descriptive method of research
- (b) Observation technique for data collection
- (c) Citation analysis
- (d) Statistical packages

2007

(December)

LIBRARY AND INFORMATION SCIENCE

(Research Methodology)

Course No. : 304

Full Marks : 75

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

Answer **five** questions, selecting **one**
from each Unit

UNIT—I

1. What do you understand by 'Research Design'? Explain with suitable examples the various types of research design. 15
2. How would you design a research proposal in the field of Library and Information Science? 15

UNIT—II

3. What is 'Historical Method' of research? Discuss the steps involved in conducting research by this method. 15
4. What are the various types of 'Data Collection Tools and Techniques'? Highlight their merits and demerits. 15

UNIT—III

5. Define 'Bibliometrics'. Discuss 'Zipf's Law' and 'Bradford's Law' in brief. 15
6. What is 'Citation Analysis'? Discuss with suitable examples. 15

UNIT—IV

7. What do you understand by 'Statistics'? Discuss with suitable examples the use and application of statistical methods in Library Management. 15
8. Explain the concept of correlation. Define Spearman's rank correlation coefficient. Calculate the coefficient of rank correlation from the following data : $5+4+6=15$

X :	48	33	40	9	16	18	65	24	12	57
Y :	13	11	22	6	5	4	20	9	7	19

UNIT—V

9. Write short notes on any *two* of the following : 7½×2=15

- (a) Lotka's law
- (b) Identification of research problem
- (c) Descriptive method of research
- (d) Bibliographic coupling

10. Discuss briefly any *two* of the following : 7½×2=15

- (a) Random Sampling
- (b) Histogram, Frequency Polygon, Frequency Curve
- (c) Central Tendency
- (d) 'Dispersion'

2008

(December)

LIBRARY AND INFORMATION SCIENCE

(Research Methodology)

Course No. : 304

Full Marks : 75

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

Answer **five** questions, selecting **one**
from each Unit

UNIT—I

1. Explain the term 'Research Design'. Discuss in detail how a problem is identified for undertaking a research. 15
2. How would you design a research proposal? Explain, in detail, the various steps involved in designing a research proposal. 15

UNIT—II

3. Highlight the merits and demerits of 'Survey Method' and 'Case Study' for doing research. 15
4. What are the various types of 'Data Collection Tools and Techniques'? Discuss the merits and demerits of at least two of them. 15

UNIT—III

5. Define 'Bibliometrics'. Discuss 'Lotka's Law' and 'Bradford's Law', in brief. 15
6. What is the difference between 'Cocitation coupling' and 'Bibliographic coupling'? Discuss with suitable examples. 15

UNIT—IV

7. Explain the advantages of diagrammatic and graphic presentation of data. Indicate the method of constructing Histogram, Frequency polygon and Ogive. 15

8. What do you understand by Measures of Dispersion? Using the following data, find out the value of Mean and Standard Deviation :

$$5+5+5=15$$

Class interval	Frequency
60-65	1
55-60	3
50-55	5
45-50	7
40-45	10
35-40	8
30-35	3
25-30	2
20-25	1
	$N = 40$

Answer five questions, selecting one from each Unit.

UNIT—V

9. Write short notes on any *two* of the following :

$$7\frac{1}{2} \times 2 = 15$$

- Random Sampling
- Central Tendency
- Correlation Analysis
- Pie Diagram

10. Discuss briefly on any two of the following : 7½×2=15

- (a) Types of Research Design
- (b) Historical Method of Research
- (c) Citation Analysis
- (d) Zipf's Law

2009

(December)

LIBRARY AND INFORMATION SCIENCE

Course No. : 304

(Research Methodology)

Full Marks : 75

Time : 3 hours

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for the questions*

Answer **five** questions, selecting **one**
from each Unit

UNIT—I

1. Enumerate different kinds of research designs based on the nature of investigation. 15
2. What are the various steps involved in designing a research proposal? Briefly discuss the components of a research proposal. $7\frac{1}{2}+7\frac{1}{2}$

UNIT—II

3. What is 'Historical Method' of research? Explain the steps involved in conducting research by this method. 5+10
4. Compare the merits and demerits of 'Questionnaire' and 'Interview Schedule' as tools for data collection. 15

UNIT—III

5. Discuss Bradford's law and Zipf's law with suitable examples. 15
6. What is 'Citation Analysis'? Explain with suitable examples. 5+10

UNIT—IV

7. What do you understand by 'Sampling'? Explain in detail different sampling methods. 5+10
8. Show your familiarity with mean, mode and median for data analysis and interpretation. 15

UNIT—V

9. Write short notes on any *two* of the following : 7½×2=15

- (a) Descriptive method of research
- (b) Observation technique for data collection
- (c) Co-citation coupling
- (d) Survey method of research

10. Discuss briefly any *two* of the following : 7½×2=15

- (a) Chi-square test
- (b) Correlation analysis
- (c) Statistical packages
- (d) Histogram, frequency polygon and frequency curve
