

**International Islamic University Chittagong (IIUC)**  
**Department of Economics & Banking**  
**Final Examination, Spring-2018**  
**Program: BSS(Honors)**

Course Code: RES-4701

Time: 2.5 Hours

Course Title: Research Methodology

Full Marks: 50

*Answer any FIVE of the following questions. All parts of a question must be answered sequentially. Figures in the right margin indicate full marks.*

1. Mention the different methods of primary data collection. Draw an outline about these methods. 10

2. (a) Explain the overall framework of the field work. 7

(b) Distinguish between primary data and secondary data. What are the sources of secondary data? 3

3. (a) Define the concepts of population, sample, parameter, statistic with necessary examples. 5

(b) Briefly define the different techniques of non-probability sampling. 5

4. (a) What is the key difference between stratified random sampling and cluster sampling? 3

(b) Sales of new hand wash of 40 respondents in a market survey are as follows: 7

40	41	45	39	48	26	23	26	41	39
35	42	44	27	28	25	38	36	32	40
43	45	39	45	45	30	25	24	29	40
42	35	25	40	43	36	32	27	26	37

(i) Determine all possible independent systematic samples each of 10 respondents.

(ii) Estimate average sale per hand wash and its standard error. Also comment on your answer.

5. (a) What is meant by data processing? Explain the different steps of data processing. 7

(b) Define regression analysis with a hypothetical example(s). Why is this concept needed in research? 3

6. (a) Write down the procedures for hypothesis testing with necessary examples. 3

(b) The mean life time of a sample of 100 light bulbs produced by a company found to be 1580 hours with standard deviation of 50 hours. Test the hypothesis that the mean life of the tubes produced by the company is 1600 hours. 3

(c) The average commission charged by full service brokerage firm on a scale of common stock is \$144 and the standard deviation is \$52. Mr. Farhan has taken a random sample of 121 traders by his clients and determined that they paid an average commission of \$151. Can Farhan conclude that his client's commissions are higher than the industry average? Use 10% level of significance. 4

7. Write short notes on : 10

(i) Simple random sampling (ii) Text matters of a good report (iii) Internship vs. thesis