

2017

M. Phil.

1st Semester Examination

COMMERCE

RESEARCH METHODOLOGY—II

PAPER—COM-112

Full Marks : 25

Time : 1 Hour

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

Candidates are required to give their answers in their own words as far as practicable.

1. Answer any two questions from the following : 2×5
- (a) What is a questionnaire? Write down the features of a good questionnaire.
- (b) Internet-based survey is becoming increasingly popular in the present day research survey. Do you agree? Explain the situations where internet-based surveys are more suitable than the traditional methods of primary survey.

(Turn Over)

(c) "Majority of the researches make use of primary sources of data and secondary data do not really contribute to a scientific enquiry"—Do you agree or disagree with this statement? Explain.

(d) What is 'bias' and how does it arise in sampling? Briefly discuss the different methods of reducing the bias.

2. Answer *any one* question from the following : 1×10

(a) (i) The Clear Cell Battery Company claims that the hearing aid battery it manufactures has an average life span that is two hours longer than the average life span of a battery manufactured by the Deracell Battery Company. In order to evaluate the claim, an independent researcher measures the life span of five randomly selected batteries from the stock of each of the two companies, and obtains the following values :

Clear Cell : 10, 8, 10, 9, 11;

Deracell : 8, 9, 8, 7, 9.

Do the data support the claim of the Clear Cell Company?

- (ii) National Insurance Company Ltd. settles the claim of Vehicle insurance of private four wheelers for Vehicle damage under Rs. 20,000/- to its owner on the basis of two estimates for repair of structural damage before allowing the insured to proceed with the work. The insurance company compares estimates from two contractors who most frequently handle this type of work in West Midnappr District. The following table shows the 10 most recent claims for which damage estimates were provided by both contractors. At the .05 level, do you find any significant difference between estimates of the two contractors? 5+5

Name of the Insured	Contractor - A	Contractor - B
1 Gupta, A.	16,000	14,000
2 Banerjee, K.	15,000	18,000
3. Ghosh, S.	12,000	15,000
4. Khan, T.L.	18,000	16,000
5. Sinha, A.	12,000	16,000
6. Sahu, T.	10,000	11,000
7. Pal, B.	17,000	17,000
8. Bera, N.	18,000	16,500
9. Biswas, D.	9,000	10,000
10. Bag, S.	11,500	13,000

- (b) (i) Briefly discuss the procedure and applicability of multi-stage random sampling with an example.

- (ii) A population consists of the four members 2, 6, 8, 12, 14, 18. Consider all possible samples of size two which can be drawn without replacement from the population.

Find :

- the mean of the sampling distribution of means,
 - the standard deviation of the sampling of means.
- 5+(2+3)

[Internal Assessment : 5 Marks]
