



M.Com. (Semester – I) Examination, November 2016
COC102 : RESEARCH METHODOLOGY AND STATISTICAL ANALYSIS
(OA – 18)

Duration : 3 Hours

Total Marks : 60

- Instructions:** 1) This paper consists of **nine** questions carrying **equal** marks.
2) Question No. 1 consists of **5 compulsory** questions of **2 marks each**.
3) Answer **any 5** questions from Question 2, 3, 4, 5, 6, 7, 8 and 9.
4) **Each** question carries **10** marks. Figures to the **right** indicate marks.

1. Answer the following questions briefly : (5×2=10)
- What is fallacy in research ?
 - State the sources of information for literature review.
 - What is a pilot survey ?
 - Explain how standard deviation is a measure of dispersion.
 - Explain any four essentials of data tabulation.
2. Calculate the correlation coefficient from the following data and interpret the same. 10

Export (Rs. Cr.)	65	63	67	64	68	62	70	66
Imports (Rs. Cr.)	68	66	68	65	69	66	68	65

3. A sample of 100 dry battery cells tested to find the length of life produced the following results :

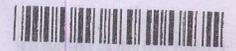
Mean battery life = 12 hours, Standard Deviation = 3 hours

Assuming that the data are normally distributed, what percentage of battery cells are expected to have life of

- More than 15 hours
- Less than 6 hours
- Between 10 and 14 hours.

10

P.T.O.



4. There are 4 different choices available to a consumer who wants to buy a mobile phone of a particular company. The first model costs Rs. 9,000, the second model costs Rs. 7,800, the third model costs Rs. 9,800 and the fourth model costs Rs. 8,600. The probabilities that the consumer would buy these models are $\frac{1}{3}$, $\frac{1}{6}$, $\frac{1}{4}$ and $\frac{1}{4}$ respectively. The retailer's commission on these models are 20%, 12%, 25% and 15% respectively. Calculate the expected commission to be earned by the retailer.

10

5. The following are the sales calls closed by the two salesmen A and B in 10 years.

A	101	27	0	36	82	45	7	13	65	14
B	97	12	40	96	13	8	85	8	56	15

a) Who is the more consistent salesman ?

b) Which Salesman closes more sales calls for the firm on an average ?

10

6. Explain the different types of research.

10

7. Explain the process of literature review.

10

8. Explain the different types of measurement scales used in research with suitable examples.

10

9. Explain the different types of research report.

10

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8. A sample of 100 dry battery cells tested to find the length of life produced the following results :

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b) Less than 6 hours

c) Between 10 and 14 hours