M.Com. (Semester – I) Examination, 2018
COC102: RESEARCH METHODOLOGY & STATISTICAL ANALYSIS
(OA – 18)

Duration : 3 Hours Total Marks : 60

Instructions: 1) This paper consists of nine (9) questions carrying equal marks.

 Question No.1 consist of 5 compulsory questions of 2 marks each.

- 3) Answer any five (5) questions from 2, 3, 4, 5, 6, 7, 8 and 9.
- 4) Tables to be provided wherever required.
- 1. Answer the following questions:

 $(5 \times 2 = 10)$ 

10

- i) Differentiate between Basic and applied research.
- ii) State the sources of literature review.
  - iii) What do you understand by Pilot survey?
  - iv) Differentiate between Type I and Type II error.
  - v) What do you understand by plagiarism in research?
- From the information given below calculate Karl Pearson's Coefficient of skewness and Quartile Coefficient of skewness.

Measures	Place X	Place Y
Mean	150	140
Median	142	155
Standard Deviation	30	55 80000000
Third Quartile	195	260
First Quartile	62	80

3. The following results were worked out from school in Statistics and Mathematics in examination.

· · · · · · · · · · · · · · · · · · ·	Statistic	Maths
Standard Deviation	10	15
Mean	40	48 een Statistic and Maths is 0.42

Find both the regression lines, use these regression lines to estimate the value of statistic when Maths is 30.

1.	x) Two cards are drawn from a pack of 52 cards. Find the probability that	5
*	i) Both are hearts	
	ii) One is black and one is red	
	iii) Exactly one king is drawn.	
.30	y) Assuming that the probability of a fatal accident in a factory during the year	
	is I/1200. Calculate the probability that in a factory employing 300 workers, there will be at least two fatal accidents in a year.	5
5.	In a random sample of 400 persons from Margao, 80 are found to be consumers	
	of wheat. In a sample of 420 from Bicholim 65 are found to be consumers of wheat. Do these data reveal a significant difference between Margao and	
	Bicholim, so far as the proportion of wheat consumers is concerned. Test it at	
	1% level of significance.	10
6	What are the essentials of questionnaire? Draft a suitable questionnaire to	
	enable you to conduct sample survey to obtain information on study habits of	10
	Goa University students and facilities available to them.	10
7.	Discuss in detail the process of research design with examples.	10
8.	"Developing a good, effective and concise report is an art form in itself".	
	Considering this statement discuss in detail the various components of	10
	Research reports.	10
9.	"Good Research generates dependable data that are derived by professionally	
	conducted practices and that can be used reliably for decision making". In view of the same discuss the features of good research and types of research	
*	in business.	10
	t he tollowing results were worked out from school in Statistics and Mathematics in examination	
	Statistic Maths	