Reg. No. : ....

Name : ....

Second Semester M.Com. Degree (Reg./Suppl./Imp.) Examination, March 2017
(2014 Admn. Onwards)
COM2C07 – RESEARCH METHODOLOGY AND COMPUTER APPLICATION

Time : 3 Hours   Max. Marks : 60

SECTION – A

Answer **any four** questions in this Section. **Each** question carries 1 mark for Part (a), 3 marks for Part (b) and 5 marks for Part (c).

1. a) What do you mean by Research ?
   b) Distinguish between Research Method and Research Methodology.
   c) Explain the various problems which a researcher in India has to face.

2. a) What do you understand by case study method ?
   b) Explain the role of case study method in research.
   c) What are statistical methods ? How are they used in research ?

3. a) What is a research problem ?
   b) How does a researcher select his topic for research ?
   c) Explain the steps followed for defining a research problem.

4. a) What is meant by sampling ?
   b) Distinguish between census and sampling methods of collecting data.
   c) What is meant by stratified random sampling ? What are its advantages over systematic sampling ?

5. a) What do you understand by sampling distribution ?
   b) Distinguish between one tailed and two tailed tests.
   c) What are the assumptions in a student 't' test ? Explain the applications of 't' test.

6. a) What is a research report ?
   b) Explain the essentials of a good research report.
   c) Explain the structure of the main text of a report.   (4×9=36)

SECTION – B

Answer the **two** questions in this Section. **Each** question carries **12** marks.

7. a) Three varieties of crops X, Y, Z are tested in a randomnised block design with four replications. The yields are given below :

	Replications				
Variety	1	2	3	4	Total
X	8	6	10	8	32
Y	9	8	6	10	33
Z	10	7	8	12	37

Test whether there is difference between varieties. Also test whether yield of X differs significantly from that of Y.

OR

b) Given the following data relating to social status and state of intelligence. Test whether intelligence is related to social status.

	Dull	Average Intelligence	Brilliant	Total
Lower Middle	20	37	23	80
Middle	40	68	32	140
Upper Middle	60	20	20	100
Total	120	125	75	320

8. a) In a test given to two groups of students, the marks obtained were as follows :

Group I   20   25   38   50   49   38   36   49   46

Group II   30   28   30   36   32   46   50

Assuming that the group standard deviations are the same and that the marks normally distributed, test the hypothesis that the group means are equal.

OR

b) What is meant by a research process ? Explain the various phases in a research process. (2×12=24)