

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086.
(For candidates admitted during the academic year 2009 – 2010)

SUBJECT CODE: CM/PC/RM34

M.Com. DEGREE EXAMINATION NOVEMBER 2010
COMMERCE
THIRD SEMESTER

COURSE : CORE
PAPER : RESEARCH METHODOLOGY
TIME : 3 HOURS **MAX. MARKS : 100**

SECTION – A

ANSWER ANY FIVE QUESTIONS: 5 x 8 = 40

1. Discuss the significance of rating scale in research.
2. Write short notes on
 - a. Pilot survey
 - b. Research hypothesis
3. Explain interview as a technique of data collection.
4. What is sample design? Discuss the points to be considered by a researcher in developing a sample design for his research project.
5. The sales data of an item in six shops before and after a special promotional campaign are:

Shops	A	B	C	D	E	F
Before the promotional campaign	53	28	31	48	50	42
After the promotional campaign	58	29	30	55	56	45

Can the campaign be judged to be a success? Test at 5% level of significance.

6. a. A simple random sampling survey in respect of monthly earnings of semi skilled workers in two cities gives the following information.

City	Mean	Standard deviation	Size of sample
A	695	40	200
B	710	60	175

Test the hypothesis at 5% level that there is no difference between monthly earnings of workers in the two cities.

- b. Find the least value of 'r' in a sample of 27 pairs from a bivariate normal population significant at 5 % level.
7. A personnel manager is interested in trying to determine whether absenteeism is greater on one day of the week than on another . His records for the past year show this sample distribution.

Day of the week	Monday	Tuesday	Wednesday	Thursday	Friday
No. of absentees	66	57	54	48	75

Test whether the absence is uniformly distributed over the week. Apply Chi square test at 5% significant level.

8. From the following data test whether the two samples are taken from two random populations having the same variance at 5% level of significance.

Sample A	62	57	65	60	63	58	57	60	60	58
Sample B	56	59	56	57	58	57	60	55	57	55

SECTION – B

ANSWER ANY THREE QUESTIONS:

3x 20 = 60

9. What do you mean by Research? Explain the various steps involved in a research process.
10. What are the features of a good research design. Describe some of the important research designs used in experimental hypothesis testing research study.
11. What is called Report writing? Explain the structure of a research report .
12. Present your conclusions after doing analysis of variance to the following results of the Latin square design experiment conducted in respect of five fertilizers which were used on plots of different fertility.

A 16	B 10	C 11	D 09	E 09
E 10	C 09	A 14	B 12	D 11
B 15	D 08	E 08	C 10	A 18
D 12	E 06	B 13	A 13	C 12
C 13	A 11	D 10	E 07	B 14

13. The following table gives the monthly sales (in thousand rupees) of a certain firm in three states by its four salesmen:

STATES	SALESMEN				TOTAL
	A	B	C	D	
X	55	54	54	57	220
Y	57	58	55	54	224
Z	59	56	56	57	228
TOTAL	171	168	165	168	272

Prepare two way analysis for the above data and state whether the difference between sales affected by the four salesmen and difference between sales affected in three states are significant at 5% level.

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