

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2006 – 07 & thereafter)

SUBJECT CODE: EC/RC/RMI 05

M.Phil. DEGREE EXAMINATION, JANUARY 2011
ECONOMICS
FIRST SEMESTER

COURSE : CORE

PAPER : RESEARCH METHODOLOGY

TIME : 3 Hours

MAX. MARKS: 100

Answer any five questions, at least two from each section and any other:

SECTION – A

1. What is the significance of binary Cartesian epistemology in the theory of knowledge?
2. Critically analyse the interaction between the questions of ‘experience’ and ‘theory’?
3. Distinguish between the deductive and inductive arguments in research with relevant illustration?
4. Bring out the importance of research design in social science research? How do you draw a research design?
5. Explain the following with examples
 - a. Random sampling
 - b. Questionnaire
 - c. Panel data
 - d. Logic

SECTION – B

6. Write down a research proposal to analyse the ‘uncertainty of farm income and crop insurance’

7. Given below is the contingency table for production in three shifts and the number of defective goods turnout. Find the value of χ^2 . Is it possible that the number of defective goods depend on the shift run by the factory?

shift	No. of defective goods in 3 weeks			
	1 st week	2 nd week	3 rd week	Total
I	15	5	20	40
II	20	10	20	50
III	25	15	20	60
Total	60	30	60	150

(Given 5% value of χ^2 at 4 d.f.=9.488)

8. Summarise the merits and demerits of various methods of data collection.
9. i. How is the technique of regression useful in economic research?
- ii. Obtain the regression equations for the following and estimate
- (a) the sale for advertising expenditure of Rs. 100 lakhs and (b) the advertisement expenditure for sale of R. 47 crores from the data given below.

Sale (Rs. Crore)	14	16	18	20	24	30	32
Adv. Exp. (Rs. Lakh)	52	62	65	70	76	80	78

10. i. Explain the various steps in formulation and testing of statistical hypothesis?
- ii. 10 persons were appointed in a electrical position in an office. Their performance was noted by giving a test and the marks recorded out of 50. They were given 6 month's training and again they were given a test and marks were recorded out of 50.

Employees	A	B	C	D	E	F	G	H	I	J
Before Training	25	20	35	15	42	28	26	44	35	48
After Training	26	20	34	13	43	40	29	41	36	46

By applying the t-test can it be concluded that employee have benefited by the training?
(given for $v=9$, $t_{0.05} = 2.262$.)
