MMS-II

RM02

20/4/13

26-02-2013.

Duration: 3 Hours Research Methodology **Maximum Marks: 60**

Total Questions:7 **Print Pages: 3**

Note: ***1)*** **Q1 is compulsory carry 20 marks**

2) Answer any 4 questions from remaining 6 questions each carry 10 marks

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Q1 (a) State wether following are True or False (15Marks)

No	Statement
1	Research is not systematic inquiry that uses disciplined methods to answer questions or solve problems.
2	A problem statement is an expression of dilemma or disturbing situation that needs investigation.
3	Closed ended questions allow participants to respond to question in their own words
4	Interview after the possibility of complete anonymity.
5	When an attribute is extremely varied in the group under investigation, the group is said to be heterogeneous
6	In non experimental research, researchers make observations of existing situations and characteristics without intervening.
7	Research questions direct rewording of statements of purpose interrogatively rather than declaratively.
8	Background of the problem need to provide a brief, focused review of the literature
9	The proposal is comprehensible to only expert in the field
10	The most common scaling technique is the visual analog scale.
11	Sample in Qualitative Research is large sample.
12	Life histories are narrative self disclosures about individual life experiences
13	Researcher used standardized instruments in Qualitative Research.
14	Open ended questions are more difficult to construct
15	Qualitative Research is test theories.

Q1 (b) Identify the type of scales in each case. (5 Marks-*Write only answers in answer sheet*)

i. The data you're collecting consists of the time taken by different participants to complete a word puzzle.
ii. The experiment compares the number of words remembered by people of different ages.
iii. The results of your study consist of the numbers of five-, ten- and fifteen-year-old children who can concentrate for five minutes.
iv. The results of your study consist of self-rated happiness scores given by participants.
v. Level of happiness is rated from 1 to 10.

Q2 Answer any two from the following (10 M)
Differentiate between:
(a) Basic research and Applied research
(b) Probability sampling and Non-Probability sampling
(c) Simple Random Sampling and Stratified Random Sampling

Q3 Answer any two from the following (10 M)
(a) What is secondary data? What are the sources of secondary data collection?
(b) What is sample? Enumerate the factors to be considered while deciding the sample size.
(c) Discuss in detail steps involved in research process.

Q4 Answer any two from the following (10 M)
(a) What is hypothesis testing? What are the types of hypotheses? Explain the errors incurred in hypotheses testing.
(b) Enumerate the different methods of collecting data. Explain its merits and demerits.
(c) What is experimental Research Design? How is it different from Exploratory Research Design?

Q5 Answer any two from the following (10 M)
Write short notes on:
(a)In-depth interviews (b) Projective Techniques (c) Focus Groups

Q6 Answer any two from the following (10 M)
(a) Give the true meaning of research. Write its characteristics. Discuss its various types at length.
(b) A genetics engineer was attempting to cross a tiger and a cheetah. She predicted a phenotypic outcome of the traits she was observing to be in the following ratio 4 stripes only 3 spots only, 9 both stripes and spots. When the cross was performed and she counted the individuals she found 50 with stripes only, 41 with spots only and 85 with both. Did she get the predicted outcome?
(c)The following is the information on likes–dislike about Hero–Honda bike across different age groups:

	Age Group			
	Below 20	20-39	40-59	Total
Liked	125	420	60	605
Disliked	75	220	100	395
Total	200	640	160	1000

Can we conclude that the scooter model appeal independent of age groups?

Q7 Identify below from the following tables:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.963[a]	.926	.926	6.684

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	559066.290	5	111813.258	2502.616	.000[a]
	Residual	44410.485	994	44.679		
	Total	603476.775	999			

a. Predictors: (Constant), x5, x4, x1, x3, x2

b. Dependent Variable: y

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	38.067	1.940		19.622	.000
	x1	15.536	.205	.654	75.918	.000
	x2	11.994	.200	.519	59.999	.000
	x3	8.365	.201	.359	41.554	.000
	x4	4.574	.197	.200	23.240	.000
	x5	.872	.201	.037	4.329	.000

a. Dependent Variable: y

Answer any two from the following (10 M)

a) Dependent and Independent Variables, Interpret on R Square value
b) Write Regression equation and Estimate regression intercept
c) Write Regression equation and Calculate R Square value using ANOVA table

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Use below values if required:

Degree of freedom	1	2	3	4	5
Chi Square value at 5% sig	3.841	5.991	7.815	9.49	11.070

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