

R09

Code No: E5103

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

MBA – I Semester Examinations, February 2011

RESEARCH METHODOLOGY AND STATISTICAL ANALYSIS

Time: 3hours

Max. Marks: 60

Answer any five questions
All questions carry equal marks

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1. a) How do you identify gaps to formulate a research problem? What is the necessity of defining a research problem? Give example to illustrate your answer?
 b) What is the importance of experimental design? Explain formal and informal experimental designs.
2. Write short notes on
 a) Semantic differential scale b) Scalogram analysis c) Likert-type scale
3. a) Mention different types of reports, particularly point out the difference between a technical report and a popular report.
 b) Discuss the importance of SPSS in Research. Describe any three statistical tests by using SPSS menu.
4. a) Explain Research Design process.
 b) Importance of Longitudinal Research. Give example.

5.

Marks in law	25	28	35	32	31	36	29	38	34	32
Marks in Systems	43	46	49	41	36	32	31	30	33	39

From the above data find the following

- i) The two regression equations
- ii) The co-efficient correlation between the marks in Law and systems
- iii) The most likely marks in systems when marks in Law are 30.

6. The per capita income of a section of community and consumer price index were as follows:

Year	2000	2001	2002	2003	2004	2005	2006
Per capita Income (Rs)	315	350	360	412	404	438	460
C.P.I (2000=100)	100	110	145	160	162	165	165

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With the above information you are required to calculate:

- i) Real per capita income by deflating the given income by appropriate price indices, and
- ii) Index of real per capita Income.

7. a) Tests were made at short intervals on spark plugs of two manufacturers. The following tabulation gives the number of hours of service of plugs from the two sources:

Plug A	200	210	190	200	190	200	180	200	200	210
Plug B	190	200	210	190	180	190	200	192		

Do these results indicate statistically significant difference between spark plugs, so far as the mean length of service is concerned?

b) Difference between two- tailed test and One- tailed test.

8. A typist in a company commits the following number of mistakes per page in typing 432 pages:

Number of mistakes per page	0	1	2	3	4	5	Total
No. of Pages	223	142	48	15	4	0	432

Does this information verify whether the mistakes are distributed according to the Poisson's Law?
