**R09** 

**Code No: E5103** 

## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD MBA – I Semester Examinations, February -2012 RESEARCH METHODOLOGY AND STATISTICAL ANALYSIS

Time: 3hours Max. Marks: 60

## Answer any <u>five</u> questions All questions carry equal marks

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- 1. Why is the methodology of doing research is important? What are some important elements of Research Methodology?
- 2. Explain the basic difference between probability and non probability sampling techniques.
- 3. What kind of input data is required for multidimensional scaling? What is the minimum sample size required to perform multidimensional scaling?
- 4. For a certain frequency table, which has only been partly reproduced here, the mean was found to be 1.46. Calculate the missing frequencies.

Number of accidents	0	1	2	3	4	5
Frequency (No. of days)	46	?	?	25	10	5

5. You are supplied the following data about heights of boys and girls in a college.

	Boys	Girls		
Number	3372	4538		
Average height	68 inches	61 inches		
Variance	296	456		

- i) Combined average of height of boys and girls. ii) Co efficient of variation of each group.
- 6. Following is the distribution of students according to their heights and weights.

**Heights in (inches)** (Weight in Lbs)

	90-100	100-110	110-120	120-130
50-55	4	7	5	2
55-60	6	10	7	4
60-65	6	12	10	7
65-70	3	8	6	3

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Calculate i) The two coefficients of regression ii) Obtain the two regression equations.

7. An IQ test was administered to 5 persons before and after they were trained. The results are given below.

Candidates	I	II	III	IV	V
IQ before training	110	120	123	132	125
IQ after training	120	118	125	136	121

Test whether there is any change in IQ after the training programmes.

- 8. Explain the following with suitable examples.
  - a) Statistic and Parameter
  - b) Critical region
  - c) Standard Error

