## **Code No:21003**

## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD MBA-I Semester Supplementary Examinations July 2010 RESEARCH METHODOLOGY AND STATISTICAL TOOLS

Time: 3hours Max.Marks:60

## Answer any Five questions All questions carry equal Marks

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- 1. What is pure research and what is applied research? How do they complement and differ from each other?
- 2. What are the various methods of collecting primary data? What are the advantages and disadvantages associated with each?
- 3. What is the concept of reliability and validity of a scale? What other criteria the scale should fulfill?
- 4. What are the requirements of a good average? Compare the mean, mode and the median in the light of these requirements.
- 5. Determine the least square regression line of
  - (a) y on x
  - (b) x on y
  - (c) Find the correlation coefficient r using the regression coefficients
  - (d) Find y(8)
  - (e) Find x(16).
- 6. A random sample of 10 boys had the following I.Q's 70, 120, 110, 101, 88, 83, 95, 98, 107 and 100.

Does this data support the assumption of a population mean I.Q of 100.

- 7. The western natural Gas Company has supplied 18,20,21,25 and 26 billion cubic feet of gas, respectively, for the years 1988 to 1992.
  - a) Find the linear estimation equation that best describes these data.
  - b) Calculate the percent of trend for these data.
  - c) Calculate the relative cyclical residual for these data.
  - d) In which years does the largest fluctuation from trend occur, and is it the same for both methods.
- 8. 'Research Report is the culmination of social science research'. Comment on the statement underlining the primary nature of research report.