SUBJECT CODE : **EC/AC/SE23**

B. A. DEGREE EXAMINATION, APRIL 2008
BRANCH IV - ECONOMICS
SECOND SEMESTER

COURSE   : **ALLIED – CORE**
PAPER   : **STATISTICS FOR ECONOMICS -II**
TIME   : **3 HOURS.**   MAX. MARKS :   100

SECTION – A
ANSWER ALL QUESTIONS.   **(10x3=30)**

1.   Define Karl Pearson's co-efficient of correlation.
2.   What is Rank Correlation?
3.   Explain the term Regression.
4.   Explain attributive qualification.
5.   What is manifold classification?
6.   What is Time Series?
7.   What is moving average?
8.   Explain the term random experiment.
9.   What is regression line?
10.   Define probability.

SECTION – B
ANSWER ANY FIVE QUESTIONS.   **(5x6=30)**

11.   State and explain `Scatter Diagram'.
12.   Describe the uses of regression lines.
13.   From the following data, examine whether there is association between
         mother's employment status and the size of family

Mother's employment status	Number of children	
	2 or less	3 or less
Employed	15	05
Not Employed	20	40

14.   Draw a trend line by the method of semi averages.

Year :	1975	1976	1977	1978	1979	1980
Sales:	60	75	81	110	106	120

15.   Explain the importance of Time series analysis in business forecasting.
16.   One card is drawn at random from a well-shuffled pack of 52 cards. What
         is the probability that it will be
         a) Diamond   b) Queen
17.   Explain the term mutually exclusive events with an example.

SECTION – C

ANSWER ANY TWO QUESTIONS. **(2x20=40)**

18. Ten competitors in a voice test are ranked by three judges in the following data.

Judge 1	1	6	5	10	3	2	4	9	7	8

Judge 2	3	5	8	4	7	10	2	1	6	9

Judge 3	6	4	9	8	1	2	3	0	5	7

    Use the method of rank correlation to gauge which pair of judges have the nearest approach to common liking in voice.

19. What is meant by regression analysis? How does it help in business decision making.

20. Compute the average seasonal movement for the following series.

YEAR	QUARTERLY PRODUCTION			
	I	II	III	IV
1974	3.5	3.9	3.4	3.6
1975	3.5	4.1	3.7	4.0
1976	3.5	3.9	3.7	4.2
1977	4.0	4.6	3.8	4.5
1978	4.1	4.4	4.2	4.5

21. State the two important Theorems of Probability.

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