

B.B.A. (NEP Pattern) Semester-I
BSL-3 - Business Statistics and Logic

P. Pages : 2

Time : Three Hours



GUG/W/24/16178

Max. Marks : 80

- Notes : 1. Attempt **any five** question.
2. All questions carry equal marks.

1. Explain the methods of Data collection. **16**

2. Determine Mean, Median & mode from the following data. **16**

Wages (Rs) above :- 330; 330-340; 340-350; 350-360; 360-370; 370-380; 380-390
No of person's :- 520, 470, 399, 210, 105, 45, 7

3. Write difference between correlation & regression analysis. **16**

4. The height (in cm) of a group of father's and son's are given below :- **16**

Height of Fathers	158	160	163	165	167	170	172	175	177	181
Hight of Son	163	158	167	170	160	180	170	175	172	175

Find out line of Regression and estimate the Height of the son when the height of father is 164 cm and also find out co-efficient of correlation.

5. Explain the Analysis of time series & use of time series. **16**

6. From the following data given below, construct Index Number's of the group of four commodities. **16**

Commodities	Base year		Current year	
	Price per unit	Expenditure	Price per unit	Expenditure
A	5	30	7	42
B	4	16	8	40
C	2	8	5	20
D	10	50	3	18

- 1) Laspeyres method
- 2) Paasche's method
- 3) Dorbish & Bowley's method
- 4) Fisher ideal Index.

7. Explain the statistical decision theory. What are the elements of a decision problem's? **16**
8. A sub committee of 6 members is to be formed out of a group of 7 men and 4 ladies. Calculate the probability that the sub-committee will consist of **16**

1) Exactly two ladies

2) At least two ladies

9. The following matrix gives the pay off of different strategies Alternative against different conditions **16**

State of Nature (product demand)				
Alternative	Hight	Moderate	Low	Nil
Expand	50,000	25,000	-25,000	-45,000
Construct	70,000	30,000	-40,000	-80,000
Subconstruct	30,000	15,000	-1,000	-10,000

Indicate the decision taken under the following approach:-

1) Pessimistic

2) Optimistic

3) Regret

4) Hurwicz criteria

10. Write short note **any two** **16**

a) Use of Arithmetic mean

b) Discuss the uses of Harmonic mean as an average

c) Index number's called "Economic barometer's".

d) What is moving average.
