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**SUBJECT CODE NO: - X-3061**  
**FACULTY OF COMMERCE AND MANAGEMENT**  
**BCOM (CBCGS)(Pattern-2018-22) F.Y SEM II**  
**Examination April / May - 2024**  
**Business Mathematics & Statistics-II**

[Time:3:00 Hours]

[Max. Marks:80]

Please check whether you have got the right question paper.

N. B

- 1) Question No. 1 is Compulsory.
- 2) Solve **Any four** question from 2 to 7.

**Q.1 A. Choose the Appropriate word from the given objections: 5**

1. ....Correlation reverts to the moments of variable in the same direction.
 

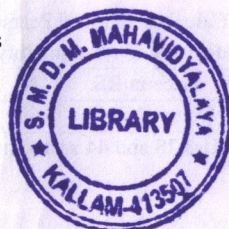
a) Simple	b) Positive
c) Partial	d) Linear
2. "Regression Analysis is the measure of Average relationship between two or more variable in the terms of original units of data"
 

a) L·R, Cannor	b) Morris
c) Karl pearson's	d) Blair
3. Paache's method is named after the German statistical paache who formulated in.....
 

a) 1872	b) 1873	c) 1874	d) 1871
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4. The Theory of probability is an important branch of.....
 

a) Mathematics	b) Physics
c) Economics	d) Statistics
5. A probability which is calculated on the basis of personal Experience or opinion is called..... probability.
 

a) Joint	b) Objectives
c) Marginal	d) Subjectives







5

**B. Give the Answer in one sentences.**

1. What is Correlation Analysis?
2. What is the use of probability?
3. What is simple event?
4. What do you mean by spss?
5. What is regression equation?

**C. fill in the Blanks:**

5

1. Regressing..... Also knows as estimating equation are algebraic expressing of the regression lines.
2. The Theory of probability is very useful in the situation of risk and .....
3. .... theorem is useful in solving practical business problems in the light & additional information.
4. Historically the first Index number was Constructed in..... to compare the Italian price Index in 1750 with the price level is 1500.
5. Fixed base method a year is fixed as base period and the prices during the base year represented by.....

**D. Write down True or false :**

5

1. Positive or direct correlation refers to the movement of variables in the same direction.
2. Index number are Indispensable tools of Economics and business Analysis.
3. Fixed base method a year is fixed as base Period and the price during the base year are respected by go.
4. All index number do not serve the same purpose,
5. A single events the probability & occurrence of which is under consideration is called a sure even.

Q.2 Attempt the following with the help of log table.

15

$$\frac{42.22 \times (8.44)^3}{50.88}$$

Q.3 Calculate the Karl Pearson's Coefficient of Correlation between price and demand of a Commodity from the following data.

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Price in RS.	20	22	24	26	28	30	32	34
Demand(in kg)	60	58	50	48	44	42	38	36

(Use 28 and 44 as assumed means for x and Y series)



- Q.4** Calculate the two regression lines and find out the age of Husband when wife's age is 27 years. Also find the age of wife if husband age is 30 years. **15**

Age of Husband	26	27	29	28	25	23	27	29	30	26
Age of Wife	23	25	26	25	23	22	26	25	25	20

- Q.5** Compute marshal's Index numbers and Laspeyre's Index method for the year 1994 using the following data concerning the four commodities. **15**

Commodity	1990		1994	
	Qty	Price	Qty	Price
A	10	40	7	50
B	5	20	8	30
C	6	30	10	40
D	9	10	10	20

- Q.6** If a coin is tossed a single time, find the probability of Coin Coming up with head. **15**

- Q.7** Write a short notes ( Any Three) **15**

1. Describe procedure to find out log value.
2. Types of Correlation
3. Write Types of regression
4. Describe Index number
5. Nature of probability

