Time: 45 Minutes   _Marks: 25_

(Answer any five from the following questions)

1. Discuss the advantages of sampling method over complete enumeration method.   *5*

2. What are the characteristics of ideal measures of dispersion?   *5*

3. Describe briefly the Lorentz curve and its applications?   *5*

4. What do you mean by time series? Briefly discuss the different types of components of a time series.

    1+4=5

5. Calculate the trend values by using 3 yearly moving averages for the following data: *5*

Year	2008	2009	2010	2011	2012	2013
Production	77	88	94	85	91	98

6. What do you mean by regression analysis? What are the properties of regression coefficients?

    2+3=5

7. Given the two regression equations $8X - 10Y + 66 = 0$ and $40X - 18Y = 214,$ find   the
   coefficient of correlation between X and Y.   *5*

8. Calculate the cost of living index from the given data.   *5*

Group	Index Number	Weights
Clothing	360	60
Food	298	5
Fuel and lighting	287	7
House rent	110	8
Miscellaneous	315	20

9. Why Fisher's index number is called an ideal index number?   *5*

10. From the following data, calculate the quantity index number by using Laspeyre's formula: *5*

Items	Base Year		Current Year	
	Price (in Rs.)	Quantity	Price (in Rs.)	Quantity
A	5	50	10	56
B	3	100	4	120
C	4	60	6	60
D	11	30	14	24
E	7	40	10	36

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