13. What is the importance of rank correlation coefficient ?

14. Explain factor reversal test.

15. What is meant by deflating index numbers ?

PART – C

Answer **any 4** questions. **Each** carries 4 marks :   (4×4=16)

16. Discuss the advantages of sampling methods over the census method of collecting statistical information.

17. Draw a frequency polygon from the following frequency distribution :

Class	50-59	60-69	70-79	80-89	90-99	100-109	110-119
Frequency	8	10	16	14	10	5	2

18. The arithmetic mean of two numbers is 13 and their geometric mean is 12. Find the numbers and their harmonic mean.

19. Write a short note on Lorenz curve.

20. Given that the mean of a distribution is 5, variance is 9 and moment measure of skewness is −1. Obtain the first three moments about origin.

21. Show that correlation coefficient always lies between −1 and 1 .

PART – D

Answer **any 2** questions. **Each** carries 6 marks :   (2×6=12)

22. Goals scored by two teams A and B in a football season were as follows. Which team is more consistent ?

No. of goals scored in a match	No. of matches	
	A	B
0	27	17
1	9	9
2	8	6
3	5	5
4	4	3

23. Derive the formula for Spearman's rank correlation coefficient.

24. Explain the uses and limitations of index numbers.

25. What are tests to be satisfied by a good index number ? Explain them with suitable examples.

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