

Syllabus
Faculty of Humanities
UG- Second Year – Semester III -(NEP)
DSC- Statistics
Generic / Open Elective OE-5
(Students from faculty other than humanities can choose this course)
Course Title - Statistics OE-5 Measures of Dispersion

Level	Semester	Type NEP	Course Code	Course Name	Credits	Teaching Hours (Per week)	Total Teaching Hours	Exam Duration	Max. Marks
5.0	UG Semester III	Minor DSC- Statistics	665214	OE-5 Statistics - Measures of Dispersion	2	2	30	2 hrs	Ext+Int = Total 30 + 20 = 50

Course Outcomes :

After completing this course students will be able to

1. Calculate and describe data through measures of Dispersion.
2. Compute the variability between series through their measures.

Serial No.	Contents	Workload Alloted	Weightage of Marks Alloted
Unit I	1.1 Concept, definition and need of dispersion 1.2 Measures of dispersion and ideal measure of dispersion 1.3 Co-efficient of range 1.4 Simple problems on range	8 Hrs	8 Marks
Unit II	2.1 Standard deviation, variance and co-efficient of standard deviation, co-efficient of variation 2.2 Merits and demerits of standard deviation 2.3 Effect of change of origin and scale on standard deviation 2.4 Simple problems on Standard deviation	7Hrs	7 Marks
Unit III	Skewness 3.1 Skewness, meaning and types, positive and negative skewness with diagram. 3.2 Measures of skewness, absolute and relative measures 3.3 Coefficient of skewness- Karl Pearson's, Bowley's and based on moments. 3.4 Numerical Problem on Skewness	8 Hrs	8 Marks
Unit IV	Kurtosis	7 Hrs	7 Marks

	4.1 Kurtosis: Meaning and types with diagram. 4.2 Measures of Kurtosis 4.3 Relation between skewness and kurtosis 4.4 Numeric problems on Kurtosis		
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Internal Assessment: 10 marks. Home Assignment: 10 marks. Unit test: 10 marks.

References :Course Material/Learning Resources

Text books:

- 1) मुलभूत सांख्यिकी प्रा. राम देशमुख विद्याप्रकाशन
- 2) संख्यात्मक तंत्रे प्रा. राम देशमुख विद्याप्रकाशन
- 3) सांख्यिकीमुलभूततंत्रे :प्रा. पुरुषोत्तम नवघरे
- 4) Bhat B.R. Shrivenkatarman T and RaoMadhava K.S. (1996) : Statistics: A Beginners's Text Vol.1, New Age International (P) Ltd.
- 5) Goon A.M., Gupta M.K., Dasgupta B: Fundamental of Statistics, Vol 1, 2, World Press Calcutta.
- 6) CroxtonF.E. , Cowden D.J.andKelin S: Applied Generatl Statistics, Prentice Hall India
- 7) Gupta S.C. ,Kapoor V.K. : Fundamental of Mathematical Statistics; S. Chand &
