

SARDAR PATEL UNIVERSITY
Programme: Master of Education
Semester: I
Syllabus with effect from: June 2013

Paper Code: PE01EMED02	Total Credits: 4
Title Of Paper: Statistical Methods in Educational Research	

Unit	Description in detail	Weightage (%)
1	Fundamentals of Statistics: Role of Statistics in Educational Research Levels of measurement: Nominal, Ordinal, Interval, Ratio Level of measurement and statistical techniques Descriptive and inferential Statistics	25 %
2	Normal Curve and its Applications: The normal distribution, the normal probability curve and its properties and application Testing the normality of distribution Skewness and Kurtosis Imposing normality on the obtained distribution Causes for non normal distribution	25 %
3	Statistical Inference: Meaning of sample, population and statistical inference Types of distribution-Population distribution, Sample distribution, Sampling distribution. Concept of central limit theorem, level of confidence, standard error confidence interval. Significance of mean, median, standard deviation, quartile deviation, percentage and coefficient of correlation	25 %
4	Scaling of Items: Scaling of scores, standardized score, T- score, C-score PR, Stanine The scaling of test items in terms of difficulty Scaling of judgment	25 %

Basic Text & Reference Books:

- Adkins, D.C. Statistical Columbus. Ohio Charles e Merrill books Inc. 1964.
- Anderson, T.R. & Morris, Zelditch, Jr. A Basic Courses in Statistics New York: Hoft. Rinchar & Winston, 1968.
- Chamption, F.J. Basic Statistics for Social research, New York, Macmillan Publishing Co. Inc. 1981.
- Cohah, Lewis & Michael, Holdiday, Statistics for Education and Physical Education. London: Harper & Row Publisher, 1979.
- Downie, M.M. & Experimental Design in Psychological Research, New York: Holt. Rinchar & Winstons. 1968.
- Edwards, A. L. Statistical Methods for the behavior Science, New York: Holt Rinchar & Winstons. 1967.
- Ferguson, G.A. Statistical Analysis in Psychology & Education New York: McGrew Hill Co. Inc. 1966.
- Fruchter, B. Introduction to Factor Analysis, New Delhi. Affiliated East West Press Pvt. Ltd. 1967.



- Gattert, H.E. & Woodworth, R.S. Statistics in Psychology and Education, Bombay: Vakils, feffer & Simons Pvt. Ltd., 1979.
- Guilford, J.P. Fundamental Statistics in Psychology and Education New York: McGraw Hill, 1965.
- Hays, W.L. Statistics for Psychologists New York Holt Rinehart, & Winston, 1965.
- Hyas, A.K. & May S.T. Statistical Methods in Education & Psychology New Delhi: Marosa Publishing House, 1980.
- Levin, Jack Elementary Statistics in Social Research, New York Harper & Row Publishers, 1977.
- Lindquist E.F. Statistical Analysis in Education Research, New Delhi Oxford and IBH Publishing Co. 1970
- Lynch, M.D. & Hundruberger, D.V. Elements of Statistical Inference for Education and Psychology, London: Allways & Bacon Inc. 1976.
- Popham, W. Hames & Sirethik, K.A. Educational Statistics New York: L Harper & Row 1973.
- Siegel Sixney, Non Parametrics Statistics for the Behaviour Sciences New York: Mc Graw Hill, 956.
- Tate, M.V. Statistical Principles in Experimental design. New York McGraw-Hill, 1971.
- Winer, B.J. Statistical Principles in Experimental design. New York: McGraw Hill, 1971.
- Winer, B.J. Statistical Principles in Experimental Design, New York : McGraw Hill, 1971
- ઉચાટ ડી.એ . વિચરણ પૃથ્થરણ રાજકોટ: સ્વ .ડા .એચ.ત્ર.દેસાઈ મેમોરીયલ ટ્રસ્ટ-૧૯૯૨
- ત્રિવેદી એમ. ડી. અને પારેખ, બી.યુ. શિક્ષણમાં આંકડાશાસ્ત્ર અમદાવાદ : યુનિવર્સિટી ગ્રંથ નિર્માણ બોર્ડ, ૧૯૮૯

