# KARACHI UNIVERSITY BUSINESS SCHOOL

# UNIVERSITY OF KARACHI

# Affiliated Colleges

| MBA – II |
| --- |
| **Course Title** : **Business Statistics**<br>**Course Number** : **BA (M) – 552**<br>**Credit Hours** : **03** |

- ➢ Definition of word statistics in singular sense as well as in plural sense
- ➢ Kinds of data and methods of its collection
- ➢ Primary and Secondary data. Grouping of data, graphic and diagrammatic representation
- ➢ Central tendency of data and its measures, their merits and demerit Quartiles
- ➢ Dispersion and it's measure, absolute and relative both
- ➢ Symmetry and skewness, measure of skewness
- ➢ Permutation and Combination. Sets operation
- ➢ Introduction to probability theory, Basic concepts of mutually exclusive and not mutually exclusive events.
- ➢ Dependent and Independent events
- ➢ Additional and multiplication laws of probability
- ➢ Concept of variables and random variable
- ➢ Mathematical expectation of a random variable
- ➢ Finding mean, variance, standard deviation and coefficient of variation of probability distribution.
- ➢ Discrete probability distribution such as binomial, hyper geometric and Poisson distribution and their properties.
- ➢ Application of these distributions in solving business problem
- ➢ Concept of regression and co-relation when X and Y are linearly related variables and their measures
- ➢ Scatter diagram and fitting curve to the observed data by principle of least square
- ➢ Index number and its types
- ➢ Weighted index number and its measures
- ➢ Consumer Price Index number and its applications

## Recommended Books:

1. Ronald E. Walpole "Introduction to statistics" , 3$^{rd}$ Edition 1989
2. Shaums outline series 1992
3. Authoen "Statistics " Cambridge university Press 1997
4. "Elementary Probability " Cambridge university press 1996
5. J.Kazmeir "Theory and problems of business statistics" Shaums outline series