

VEER NARMAD SOUTH GUJARAT UNIVERSITY,**F.Y.B.COM.****STATISTICS FOR BUSINESS**

(With Effect From Academic Year 2006-2007)

- (1) **CALCULUS** (20%)
- a) Rules for taking Limit of a function
 - b) Definition and rules (without proof) of differentiation, derivatives of a composite and implicit functions, second order derivative, partial derivative. Maxima and minima of a function, necessary and condition for existence of maxima and minima of a function and it's application to problems relating to business, commerce and economics.
 - c) Integration :
Concept of definite and indefinite integration of a function and integration of standard form x^n , a^x , e^x , $\log x$ etc.
- (2) **ANALYSIS OF CATEGORICAL DATA** (10%)
Meaning of categorical data, consistency of categorical data, independent and association of attribute, various measures of association for two classified data. (2x2 and 2xn)

PROBABILITY (15%)
Revision of probability, Conditional probabilities, Concepts of a prior and posterior probability Bays theorem and its application.

PROBABILITY DISTRIBUTION (30%)
Concept of probability, distribution, Binomial distribution, its Properties and uses Recurrent relation and application, Poisson distribution, its Properties, uses mean and variance and it's application. Normal distribution, its application Geometric distribution with application,

STATISTICAL QUALITY CONTROL**(25%)****a) Control Charts**

Importance of statistical methods on industrial research and practice. Concept of quality control (S.Q.C.) and advantages. General theory Control Charts, specification limits tolerance limits modified Control limits and their inter relationship.

Control charts for variable : X charts and R charts

Control charts for attributes : np charts, p charts, c charts :

Books :

Pavate D.C. Bhagwat : The Element of Calculus : Popular Prakasan,
Bombay

Gupta S.P. : Statistical method : S.chand & Co.,
New Delhi

Rohtgi V. K. : An introduction to probability theory and
mathematical statistics : Wiley Estern Ltd.

Sancheti D. C. Kapoor V.K. : Statistics : Sultan chand & sons, New Delhi

Grant E. L. : Statistical Quality control : Mc Graw Hill
Book Co.