## C. U. SHAH UNIVERSITY WADHWANCITY



Faculty : Arts \& Humanities
Department : Economics
Branch : B.A. Economics
Semester : V
Name of Subject : Basic Statistics
Subject Code : 4AH05BAS1

TEACHING \& EVALUATION SCHEME:

| Subject Code | Name of the Subject | Teaching Scheme (Hours) |  |  |  | Evaluation Scheme |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Th | T | P | $\begin{gathered} \text { Tot } \\ \text { al } \end{gathered}$ | Theory |  |  |  |  | Practical <br> (Marks) |  |  | Total |
|  |  |  |  |  |  | Sessional Exam |  | University Exam |  | Total | $\begin{gathered} \text { Pr/ } \\ \text { Viv } \\ \text { a } \end{gathered}$ | $\begin{gathered} \mathbf{T} \\ \mathbf{W} \end{gathered}$ | $\begin{gathered} \text { To } \\ \text { tal } \end{gathered}$ |  |
|  |  |  |  |  |  | $\begin{gathered} \mathrm{Mar} \\ \mathrm{ks} \\ \hline \end{gathered}$ | Hrs | $\begin{gathered} \hline \text { Ma } \\ \text { rks } \end{gathered}$ | Hrs |  |  |  |  |  |
| $4 \mathrm{AH05BAS} 1$ | Basic <br> Statistics | 3 | 0 | 0 | 3 | 30 | 1.5 | 70 | 3 | 100 | - | - | - | 100 |

## Objectives:

Formulate theorems about the concept of probability. Calculate probabilities using Conditional probability, Rule of total probability and Bayes' theorem. explain the concept of a random variable and the probability distributions. Define the concept of a random variable.

## - Course Outline:-

Statistics majors should be able to: Distinguish types of studies and their limitations and strengths, ... Communicate concepts in probability and statistics using both technical and non-technical language. learning appalled statistics

| Unit <br> No. | Content | Maximum <br> Hours |
| :---: | :--- | :---: |
| 0 | Prerequisites | 02 |
| 1 | Concept of a statistical population sample sem a population <br> simple statistical, population parameter ,discrete and continuous <br> data , frequency distribution graphical representation of a <br> frequency distribution by histogram and frequency polygen | 12 |


| 2 | Cumulative frequency, measure of location (Central tendency , <br> Deviation mean deviation, standard deviation variance, standard <br> deviation . | 10 |
| :---: | :--- | :---: |
| 3 | Correction and regression, Karl pearson coefficient of <br> correlation, dispersion moments, measure of skewness and <br> kurtosis . | 08 |
| 4 | Sample space, events, algebra of event, definition of probability <br> Classical relative frequency and axiomatic approaches <br> probability, multiplication law of probability, conditional <br> probability, independent event, bayes's theorem. | 13 |
| Total Hours | $\mathbf{4 5}$ |  |

## Reference:

(1) S.C.Gupta \& V.K.kapoor :Fundamental of applied statistics Sultan Chand \& Sons New Delhi(2007)
(2) Sancheti \& Kapoor: Business Mathematics"Sultan chand \& Sons,New delhi.
(3) Kapoor V.K.: Business Mathematics"Sultan chand \& Sons,New delhi.
(4) Parimal Mukhopadhyay:Mathematical Statistics" Books \& allied (p) Ltd.(2000).

