

Solapur University, Solapur
New Syllabus
B.Com.III
(Optional) - Paper - I
ADVANCED STATISTICS
(w.e.f. June 2010)

Section I

Unit -I PERMUTATIONS & COMBINATIONS (12)

Definitions and Relations between them,
Simple examples based on them.
Binomial Theorem (without proof)
Simple examples based on it

Unit – II MATRICES (15)

Definition of Matrix, Types of Matrices.
Algebra of Matrices (Addition Subtraction & Multiplication)
Inverse of matrix by Ad joint method.
Examples based on matrices upto order 3

Unit – III PROBABILITY THEORY (15)

Definition of terms used in probability, Definition of probability,
Definition of conditional probability
Additive & Multiplicative theorems on probability,
Bays theorem, Examples based on these

Unit – IV RANDOM VARIABLE & PROBABILITY DISTRIBUTION (15)

Meaning of random variable, concept of discrete & continuous random variables. Definition of probability mass function & probability density function Distribution function. Definition of Bivariate discrete random variable.. Joint probability mass function of X & Y
Marginal & Conditional Probability Distributions.

Distribution of marks for the University exams for all faculties.

1. (a) 20 % Marks – Objectives questions.

40 % Marks - Short notes / short answer type questions/

Short Mathematical type questions

40 % Marks - Descriptive type questions / Long

Mathematical type questions

Out of 20 % Marks for objective questions 10 % marks Should be assigned to multiple choice questions and remaining 10 % be assigned to fill in the blanks / answer in one sentence etc. However, each faculty may decide nature and types of questions to be set subject to distribution of above percentage of marks.

(b) One descriptive type question will be Compulsory Paper setter should mention approximate words limit for short note / short answer type questions except Diagrammatical and Numerical questions.