

Name of Class: M.Sc.(Statistics) Semester-II

Name of Course: Inference-II

Unit: II

Name of Teacher: Prof. Indra Rani

Lecture Schedule of the week: 23.02.2015 to 28.02.2015

Outline of lesson to be delivered in the classes (Compiled Information)

Ø **The completeness of sufficient statistic for parent distributions whose range is a function of a single parameter.**

Ø **Illustrations.**

Ø **Concept of sequential analysis.**

Ø **Illustrations.**

Reference Book: Advanced Theory of Statistics, Chapter- 23 & 34 , Vol.-II,

By Kendal , M.G. & Stuart, A.

Name of the Class : M.Sc. (Statistics) Semester-IV

Name of the Course : Non- Linear and Dynamic Programming-Paper III & IV Opt.(ii)

Unit-III

Name of Teacher : Prof. Indra Rani

Lecture Schedule of the week :23.02.2015 to 28.02.2015

Outline of Lectures to be delivered in the classes (Compiled information)

Classical Optimization Techniques :

- Ø **Concept of convex and concave functions & their maxima and minima.**
- Ø **Saddle point problems.**
- Ø **Kuhn - Tucker Necessary and Sufficient Conditions for saddle points.**
- Ø **Illustrations.**

Reference : Mathematical Programming By Kambo, N.S.

Introduction to Operations Research By Churchman, C.W.

Name of Class: M.Sc.(Statistics) Semester-II

Name of Course: Demography (Unit- II) & Practical based on C

Name of Teacher: Dr. Ram Niwas (on Contract Basis)

Lecture Schedule of the week: 23.02.15 to 28.02.15

Outline of lesson to be delivered in the classes (Compiled information of the lesson plan)

Topic: Measurement of fertility

**To be
Delivered on**

Specific fertility rate and age Specific fertility rate .

23/02/2015

Total fertility rate with merits and demerits.

24/02/2015

Topic: Measurement of population growth

Crude rate of natural increase and vital index of population for

Measurement of population growth

25/02/2015

Gross Reproduction rate for Measurement of population growth

26/02/2015

Net Reproduction rate for Measurement of population growth

27/02/2015

Examples based on various measures of population growth

28/02/2015

Reference: Fundamental Applied Statistics by S.C. Gupta & V.K. Kapoor

Lab Work: Practical will based on C

Computation of moments, skewness and kurtosis of given data.

25/26/02/2015
(B-I)& (B-II)

Computation of Spearman's rank correlation coefficient.

27/28/02/2015
(B-I)& (B-II)

Name of Class: M.Sc.(Statistics) Semester-IV

Name of Course: Multivariate Analysis (Unit: I)

Name of Teacher: Dr. M.S. Kadyan

Lecture Schedule of the week: 23.02.15 to 28.02.15

Outline of lesson to be delivered in the classes (Compiled information of the lesson plan)

Title of the topic:

Multiple and partial correlation coefficient

Characteristic function when the random vector is normally distributed

Related theorems based on Multiple and partial correlation coefficient

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Reference: Anderson, T.W; An introduction to Multivariate Statistical Analysis.

Name of Class: M.Sc.(Statistics) Semester-IV

Name of Course: Reliability and Renewal Theory (Unit: I)

Name of Teacher: Dr. M.S. Kadyan

Lecture Schedule of the week: 23.02.15 to 28.02.15

Outline of lesson to be delivered in the classes (Compiled information of the lesson plan)

Title of the topic:

Reliability evaluation of

Series System,

Parallel System

and Redundant systems

Reference: Billinton, R. :Reliability Evaluation of Engineering Systems.

Name of the Class: M. Sc. (Statistics) Semester-2nd

Name of the Course: Computer Fundamentals and Problem Solving Using C; Unit-2

Lecture of schedule of week: 23-02-15 to 26-02-15

Title of the topic

Structure of a C Program.

Character set

Identifiers and keywords

Data types

Reference

1. Gottfried, Byron S., Programming with C, Tata McGraw H ll
2. Balagurusamy, E., Programming in ANSI C, McGraw-Hill
3. Jeri R. Hanly & Elliot P. Koffman, Problem Solving and Program Design in C, Addison Wesley.
4. Yashwant Kanetker, Let us C, BPB

Name of the Class: M. Sc. (Statistics) Semester-4th

Name of the Course: Linear Estimation & Design of Experiments; Unit-1

Lecture of schedule of week: 23-02-15 to 26-02-15

Title of the topic

One-way and two way classifications:

Fixed effects

Random effects

Mixed effects Models

Reference

1. Kshirsagar, A.M.(1972) : Linear Models, Il-Dekhar
2. Searle, S.R.(1971) : Linear Models , John Wiley & sons New York.
3. Chakrabarti, M.C.(1962):Mathematics of Design and Analysis of Experiments, Asia Publishing House
- 4.Joshi, D.D (1990) : Linear Estimation and Design of Experiments ,Wiley Eastern Ltd.
- 5.Angela Dean and Daniel : Design and Analysis of Experiments, Springer. Voss (1999)
- 6.Giri, N.(1986) : Ana iance, South Asian Publishers.

Practical (Computer based)

Title of the topic

Testing the significance of an observed correlation coefficient.

(Dr. Jitender Kumar)
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DEPARTMENT OF STAT & O. R., K.U. KURUKSHETRA

Name of the Class : M.Sc. (Statistics) Semester-IV

Name of the Course : Information Theory opt.(iii)

Unit: II

Name of Teacher : Prof. N.K. Jain (Guest Faculty)

Lecture Schedule of the week: 23-2-2015 - 28-2-2015

Outline of lesson to be delivered in the classes (Compiled information of the lesson plan)

Title of the topic

1. Measure of Mutual Information
2. Shannon's fundamental inequalities
3. Redundancy, efficiency and channel capacity
4. Capacity of channels with symmetric noise structure

Reference _____

1. An introduction to Information
Theory

F. M. Reza

McGraw Hill Book Co. Inc.

N.K. Jain
19/21/2015

DEPARTMENT OF STAT & O. R., K.U. KURUKSHETRA

Name of the Class : M.Sc. (Statistics) Semester-II

Name of the Course : Operations Research

Unit: II

Name of Teacher : Prof. N.K. Jain (Guest Faculty)

Lecture Schedule of the week: 23-2-2015 - 28-2-2015

Outline of lesson to be delivered in the classes (Compiled information of the lesson plan)

Title of the topic

1. Assignment problems
2. Basic Concept of Decision Theory
3. Types of decision making.

Reference

1. Operations Research
Pragati Prakashan, Meerut
 2. Operations Research
Theory and Applications
Mac Millan
- B. S. Goel and S. K. Mittal
J. K. Sharma.

N. P. Jain
19/2/2015