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

**Name of Course: Inference-1I** **Unit: II**

**Lecture Schedule of the week: 16.03.2015 to 21.03.2015**

**Name of Teacher: Prof. Indra Rani**

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

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- **Cumulants of non – central chi square distribution.**
- **Asymptotic distribution of the Likelihood Ratio statistic.**
- **Asymptotic power of Likelihood Ratio Tests.**

**Reference Book: Advanced Theory of Statistics, Chapter- 24 , 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-II**

**Name of Teacher : Prof. Indra Rani**

**Lecture Schedule of the week: 16.03.2015 to 21.03.2015**

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

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**Classical Optimization Techniques :**

- **Beale's approach for treating the quadratic objective function.**
- **Illustrations.**
- **Separable programming problem.**
- **Reduction of Separable programming problem to Linear programming problem.**

**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- III) & Practical based on C**

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

**Lecture Schedule of the week: 16.03.2015 to 21.03.2015**

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

| **Unit-III** | **To be Delivered on** |
|---|---|
| **Topic: Structure of Populations** | |
| Lotka's Stable Population model | 16/03/2015 |
| Fundamental equation of stable population theory | 17/03/2015 |
| Find Intrinsic rate of growth | 18/03/2015 |
| Find Intrinsic birth rate of stable population | 19/03/2015 |
| Find Intrinsic death rate of stable population | 20/03/2015 |
| Find intrinsic age distribution | 21/03/2015 |

**Reference: Fundamental Applied Statistics by S.C. Gupta & V.K. Kapoor and Technical Demography by R. Ramakumar**

| | |
|---|---|
| **Lab Work: Practical will based on C** | |
| Fitting of Binomial distribution. | 18/19/03/2015 (B-I)& (B-II) |
| Fitting of Poisson distribution | 20/21/03/2015 (B-I)& (B-II) |

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

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

Name of the Course : Operations Research Unit: IV

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

Lecture Schedule of the week : 16/3/2015 — 21/3/2015

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

Title of the topic

1. Game Theory: Terminology
2. Two person zero sum game.
3. Game of pure strategy

Reference

1. Operations Research Pragati Prakashan Meerut — B. S. Goel and S. K. Mittal
2. Operations Research Theory and Applications McMillan — J. K. Sharma.

NJain
10/3/2015.

## 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 & III

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

Lecture Schedule of the week: 16-03-2015 — 21-03-2015

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

Title of the topic

1. Uniqueness of entropy function
2. Elements of encoding
3. Separable Codes

Reference

An Introduction to Information Theory — F. M. Reza. McGraw Hill Book Co. Inc.

N Jain
10/3/2015