

Name of the Class: M. Sc. (Statistics) Semester-1<sup>st</sup>

Name of the Course: Statistical Methods and Distribution theory; Unit-2

Title of the topic	Date
Mathematical Expectation	15.09.14
Moment generating function	16.09.14
Tchebycheff's Inequalities	17.09.14
Jensen Inequalities	18.09.14

Reference

1. Parzen, E. : Modern Probability Theory and its Applications, Wiley Interscience
2. Meyer, P.L. : Introductory Probability and Statistical Applications, Addison wesely.
3. Cramer, H. : Random variable and Probability Distribution, Cambridge University Press.
4. Gupta, S.C. and Kapoor, V.K., Fundamental of mathematical statistics, Sultan chand and sons.

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

**Name of Course: Inference-1**

**Unit: 1I**

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

**Lecture Schedule of the week: 15.09.2014 to 20.09.2014**

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

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- Ø Sufficiency and minimum variance.
- Ø Illustrations on sufficient statistics.
- Ø State and prove Rao – Blackwell Theorem on sufficiency.

**Reference Book: Advanced Theory of Statistics, Chapter-17, Vol.-II, By Kendal , M.G. & Stuart, A.**

**Lab Work :**

**Practical based on time-series to the students of Batch-I &Batch-II**

**To obtain trend by using method of moving average.**

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

**Name of Course: Applied Statistics (Unit: II) & Practical based on SPSS**

**Name of Teacher: Dr. M.S. Kadyan**

**Lecture Schedule of the week: 15.09.14 to 20.09.14**

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

<b>Title of the topic:</b>	<b>To be Delivered on</b>
1. Periodogram & Correlogram	17/09/2014
2. Correlogram of first order auto-regressive series.	18/09/2014
3. Correlogram of second order auto-regressive series.	19/09/2014
4. Correlogram of moving average scheme.	20/09/2014
<b>Reference: Fundamental of Applied Statistics by S.C. Gupta &amp; V.K. Kapoor</b>	
<b>Lab Work: Practical will based on SPSS</b> : To measure central tendency.	15/09/2014 (B-III) 19/09/2014 (B-I) 20/09/2014 (B-II)

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

**Name of Course: Practical based on Calculator**

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

**Lecture Schedule of the week: 15.09.14 to 20.09.14**

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

**Topic: Time series**

To obtain trend by using Spencer's 15-point formula.

**To be  
Delivered on**

B-II & III

15/09/2014

B-I

20/09/2014

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

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

**Name of Course: Sampling Theory (Unit: II and III)**

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

**Lecture Schedule of the week: 15.09.14 to 20.09.14**

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

**Topic: Two Stage Sampling**

**To be  
Delivered on**

Define two Stage sampling and find estimate of its mean.

15/09/2014

Find estimate of variance for two stage sampling with  
equal first stage units.

16/09/2014

**UNIT:III**

**Topic: Sampling and Sub Sampling of Clusters.**

Define single stage cluster sampling and find estimate of its mean.

17/09/2014

Find variance of mean for equal single stage cluster sampling.

18/09/2014

Find relative efficiency of cluster sampling.

19/9/2014

Define Cluster sampling for proportions and also derive an expression  
for variance of proportion.

20/09/2014

**Reference: Sampling Theory by Des Raj and Chandak**

Name of the Class: M. Sc. (Statistics) Semester-3<sup>rd</sup>

Name of the Course: C++ and JAVA; Unit-1

Title of the topic	Date
Constructor	17.09.14
Parameterized Constructor and Copy Constructor	18.09.14
Destructor	19.09.14
Operator Overloading	20.09.14

Reference

1. Stroustrup, B. : The C++ Programming Language, Addison-Wesley, 1993
2. Lippman : C++ Primer, 3/e, Addison-Wesley
3. Balaguruswami, E. : Object Oriented Programming In C++, Tata McGraw-Hill.
4. Schildt, Herbert. : C++: The Complete Reference, 2/e, Tata McGraw-Hill,

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

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

**Unit-II**

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

**Lecture Schedule of the week : 15.09.2014 to 20.09.2014**

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

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**Topic : Use of perturbation technique with simplex tableau format.**

**Topic : The generalized linear programming problems.**

**Topic : Generalized Simplex Method.**

**Reference: Linear Programming By G.Hadley ( Chapter 6)**

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

**Name of Course: Stochastic Process**

**Unit: II**

**Name of Teacher: Dr. M.S. Kadyan**

**Lecture Schedule of the week: 15.09.14 to 20.09.14**

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

**Title of the topic:**

**To be  
Delivered on**

1. Random Walk Models.

15,16/09/2014

2. Gambler's Ruin Problem.

17,18/09/2014

**Reference: The Elements of Stochastic Process by N.T. Bailey**