

ST. ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY: CHIRALA
DEPARTMENT OF COMPUTERS SCIENCE & ENGINEERING
LECTURE SCHEDULE

Subject: STATISTICS WITH R PROGRAMMING

Academic Year: 2019-20

Name: Dr.S.INDRANEEL

Year & Sem/Section: II-I SEM 'B'

NO. OF LECTURES PER WEEK : 4+1* (TUTORIAL)

| S. NO | DATE | UNITS | TOPICS |
|-------|------------|---------------------|-----------------------------------------------------------------------------|
| 1 | 10/06/2019 | I | Introduction: R programming overview |
| 2 | 11/06/2019 | | How to run R |
| 3 | 12/06/2019 | | Basic Math, Variables |
| 4 | 14/06/2019 | | R Sessions and Functions |
| 5 | 15/06/2019 | | Data Types, Vectors, |
| 6 | 17/06/2019 | | Advanced Data Structures, |
| 7 | 18/06/2019 | | TUTORIAL |
| 8 | 19/06/2019 | | Data Frames, |
| 9 | 21/06/2019 | | Lists, Matrices |
| 10 | 22/06/2019 | | Arrays, Classes. |
| 11 | 24/06/2019 | | REVISION USING PPT |
| 12 | 25/06/2019 | | TUTORIAL |
| 13 | 26/06/2019 | | UNIT TEST -1 |
| 14 | 28/06/2019 | II | R Programming Structures, Control Statements |
| 15 | 29/06/2019 | | Loops, - Looping Over Nonvector Sets |
| 16 | 01/07/2019 | | If-Else, Arithmetic and Boolean Operators and values, |
| 17 | 02/07/2019 | | TUTORIAL |
| 18 | 03/07/2019 | | Default Values for Argument, Return Values |
| 19 | 05/07/2019 | | Deciding Whether to explicitly call return- Returning Complex Objects, |
| 20 | 06/07/2019 | | Functions are Objective, No Pointers in R, |
| 21 | 08/07/2019 | | Recursion |
| 22 | 09/07/2019 | | TUTORIAL |
| 23 | 10/07/2019 | | A Quicksort Implementation-Extended Extended Example: A Binary Search Tree. |
| 24 | 12/07/2019 | | REVISION USING PPT |
| 25 | 15/07/2019 | UNIT TEST -2 | |
| 26 | 16/07/2019 | III | TUTORIAL |
| 27 | 17/07/2019 | | Doing Math and Simulation in R, Math Function, -Minima and Maxima |
| 28 | 19/07/2019 | | Extended Example Calculating Probability- Cumulative Sums and Products |
| 29 | 20/07/2019 | | Calculus, Functions For Statistical Distribution, |
| 30 | 22/07/2019 | | Sorting, |
| 31 | 23/07/2019 | | TUTORIAL |
| 32 | 24/07/2019 | | Linear Algebra Operation on Vectors and Matrices |
| 33 | 26/07/2019 | | Extended Example: Vector cross Product |
| 34 | 27/07/2019 | | Extended Example: Finding Stationary Distribution of Markov Chains |
| 35 | 29/07/2019 | | Set Operation, Input /out put |
| 36 | 30/07/2019 | | TUTORIAL |
| 37 | 31/07/2019 | | Accessing the Keyboard and Monitor |
| 38 | 02/08/2019 | | Reading and writer Files |
| 39 | 03/08/2019 | | REVISION USING PPT |
| 40 | 05/08/2019 | | REVISION |
| 41 | 06/08/2019 | | REVISION |
| 42 | 07/08/2019 | REVISION | |

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|----|------------|----------------------------|---------------------------------------------------|---------------------------|
| 43 | 09/08/2019 | | REVISION | |
| 44 | 10/08/2019 | | REVISION | |
| 45 | 13/08/2019 | IV | TUTORIAL | |
| 46 | 14/08/2019 | | Graphics | |
| 47 | 16/08/2019 | | Creating Graphs | |
| 48 | 17/08/2019 | | The Workhorse of R Base Graphics | |
| 49 | 19/08/2019 | | the plot() Function – Customizing Graphs | |
| 50 | 20/08/2019 | | TUTORIAL | |
| 51 | 21/08/2019 | | the plot() Function – Customizing Graphs | |
| 52 | 26/08/2019 | | Saving Graphs to Files | |
| 53 | 27/08/2019 | | TUTORIAL | |
| 54 | 28/08/2019 | | Saving Graphs to Files | |
| 55 | 30/08/2019 | | REVISION USING PPT | |
| 56 | 31/08/2019 | | UNIT TEST -3 | |
| 57 | 03/09/2019 | | V | TUTORIAL |
| 58 | 04/09/2019 | | | Probability Distributions |
| 59 | 06/09/2019 | Normal Distribution | | |
| 60 | 07/09/2019 | Binomial Distribution | | |
| 61 | 09/09/2019 | Poisson Distributions | | |
| 62 | 11/09/2019 | Other Distribution | | |
| 63 | 13/09/2019 | Basic Statistics | | |
| 64 | 16/09/2019 | Correlation and Covariance | | |
| 65 | 17/09/2019 | TUTORIAL | | |
| 66 | 18/09/2019 | T-Tests,-ANOVA | | |
| 67 | 20/09/2019 | REVISION USING PPT | | |
| 68 | 21/09/2019 | UNIT TEST -4 | | |
| 69 | 23/09/2019 | VI | Linear Models | |
| 70 | 24/09/2019 | | TUTORIAL | |
| 71 | 25/09/2019 | | Simple Linear Regression-Multiple Regression | |
| 72 | 27/09/2019 | | Generalized Linear Models | |
| 73 | 28/09/2019 | | Logistic Regression- Poisson Regression | |
| 74 | 30/09/2019 | | other Generalized Linear Models-Survival Analysis | |
| 75 | 01/10/2019 | | Nonlinear Models | |
| 76 | 04/10/2017 | | Splines- Decision- Random Forests | |
| 77 | 05/10/2017 | | REVISION USING PPT | |
| 78 | 07/10/2017 | | REVISION | |
| 79 | 08/10/2017 | | REVISION | |
| 80 | 09/10/2017 | | REVISION | |
| 81 | 11/10/2017 | | REVISION | |
| 82 | 12/10/2017 | | REVISION | |

Text Books

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|---|---------------------------------------------------------------|
| 1 | 1) The Art of R Programming, A K Verma, Cengage Learning. |
| 2 | 2) R for Everyone Lander, Pearson |
| 3 | 3) The Art of R Programming, Norman Matloff, No starch Press. |

References

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|---|------------------------------------|
| 1 | R Cookbook, Paul Teetor, Oreilly. |
| 2 | R in Action, Rob Kabacoff, Manning |

FACULTY MEMBER

HEAD OF THE DEPARTMENT