

Yashwantrao Chavan College of Science ,Karad

Department of Statistics

ICT Tools used for teaching learning

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Yashwantrao Chavan College of Science ,Karad

Department of Statistics

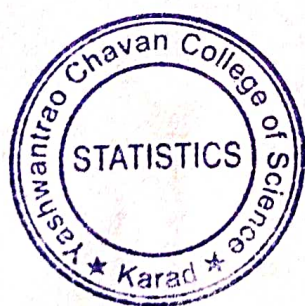
ICT record (2022-23)

PPT lecture on Design of Experiment by Miss. Thombare P.J.

Attendance sheet

Date: 14/09/2022

Roll No.	Name of Student	Sign
2021	SHETE SHIVTEJ ADHIK	<u>Shivtej</u>
2031	GAIKWAD PRAJAKTA ANKUSH	<u>Peeakte</u>
2032	JADHAV VISWAMOHINI YUVARAJ	<u>Jadhav</u>
2033	PAWAR DIGVIJAY RAVIRAJ	<u>Pawar</u>
2034	SURYAWANSHI VIVEK DADASO	<u>Suryawanshi</u>
2035	YADAV SHIVANJALI VINAYAK	<u>Yadav</u>

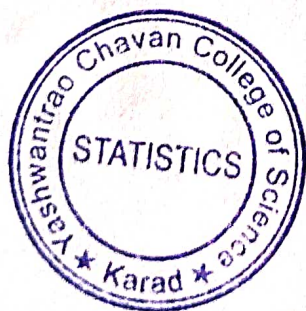


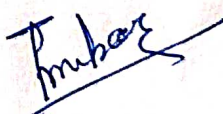
Yashwantrao Chavan College of Science ,Karad
Department of Statistics
ICT record (2022-23)
Statistical YouTube video lecture

Statistics and Society
(<https://www.youtube.com/watch?v=9Xv8vB7C6mM&pp=ygUSc3RhdGlzdGljcyB1c2luZyBy>)

Date: 16/04/2023

Roll No.	Name of Student	Sign
2021	SHETE SHIVTEJ ADHIK	Shivtej
2031	GAIKWAD PRAJAKTA ANKUSH	Prajakta
2032	JADHAV VISWAMOHINI YUVARAJ	Jadhav
2033	PAWAR DIGVIJAY RAVIRAJ	Pawar
2034	SURYAWANSHI VIVEK DADASO	Suryawanshi
2035	YADAV SHIVANJALI VINAYAK	Yadav




Teacher incharge
(Thombare P.J.)

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Department of Statistics

ICT record (2022-23)

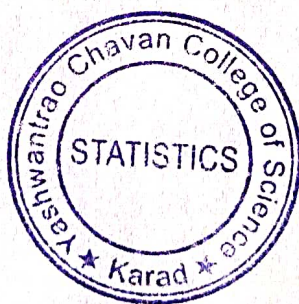
E Notes

Link:

<https://www.gs.washington.edu/academics/courses/akey/56008/lecture/lecture4.pdf>

<https://archive.nptel.ac.in/courses/111/105/111105043/>

https://www.colorado.edu/amath/sites/default/files/attached-files/lesson3_probdistns.pdf



Yashwantrao Chavan College of Science ,Karad

Department of Statistics

ICT record (2021-22)

PPT lecture on Design of Experiment by Miss. Thombare P.J.

Attendance sheet

Date: 29/12/2021

Roll No.	Name of Student	Sign
3041	BHOSALE ATUL SUBHASH	<i>Bhosale</i>
3043	GURAV ANKUSH MAHESH	<i>Gurav</i>
3044	INGALE NIKITA GORAKH	<i>Ningale</i>
3045	JADHAV ARPITA VIJAY	<i>Jadhav</i>
3046	NANGARE VIKAS BAJARANG	<i>Nangare</i>
3047	NIKAM SONALI SATISH	<i>Nikam</i>
3048	PATIL PRAJWAL PRITAM	<i>Patil</i>
3049	SUTAR SURAJ ASHOK	<i>Sutar</i>
3050	THETE PRADNYA PRAMOD	<i>Thete</i>
3051	THORAT AKSHAY SAMBHAJI	<i>Thorat</i>
3052	MULIK SWARANJALI SAMBHAJI	<i>Mulik</i>
3053	KAMBLE ASHWAGHOSH MAHAVIR	<i>Kamble</i>
3054	MANE PRANIT POPAT	<i>Mane</i>
3055	NALAWADE MANALI LAXMAN	<i>Nalawade</i>
3056	SHEWAL AISHWARYA HINDURAO	<i>Shewal</i>



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ICT record (2021-22)

Statistical YouTube video lecture

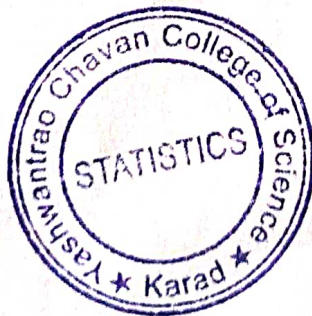
Statistics and Society

(<https://www.youtube.com/watch?v=I-3tS1Kg3pc&pp=ygUOYW5pbCBnb3JlIHNOYXQ%3D>

Attendance sheet)

Date: 05/04/2022

Roll No.	Name of Student	Sign
3041	BHOSALE ATUL SUBHASH	<u>Bhosale</u>
3043	GURAV ANKUSH MAHESH	<u>Gurav</u>
3044	INGALE NIKITA GORAKH	<u>Ingale</u>
3045	JADHAV ARPITA VIJAY	<u>Jadhav</u>
3046	NANGARE VIKAS BAJARANG	<u>N</u>
3047	NIKAM SONALI SATISH	<u>Sonali</u>
3048	PATIL PRAJWAL PRITAM	—
3049	SUTAR SURAJ ASHOK	<u>Sutar</u>
3050	THIETE PRADNYA PRAMOD	—
3051	THORAT AKSHAY SAMBHAJI	<u>Akshay</u>
3052	MULIK SWARANJALI SAMBHAJI	<u>Mulik</u>
3053	KAMBLE ASHWAGHOSH MAHAVIR	—
3054	MANE PRANIT POPAT	<u>Mane</u>
3055	NALAWADE MANALI LAXMAN	<u>Nalawade</u>
3056	SHEWAL AISHWARYA HINDURAO	—



P. Thombare

Teacher incharge

(Thombare P.J.)

Yashwantrao Chavan College of Science ,Karad

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ICT record (2021-22)

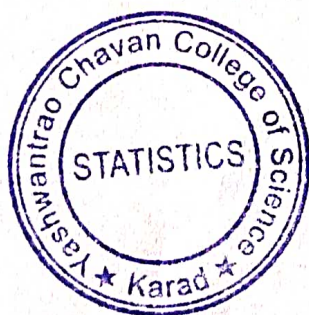
E Notes

Link:

<https://www.gs.washington.edu/academics/courses/akey/56008/lecture/lecture4.pdf>

<https://archive.nptel.ac.in/courses/111/105/111105043/>

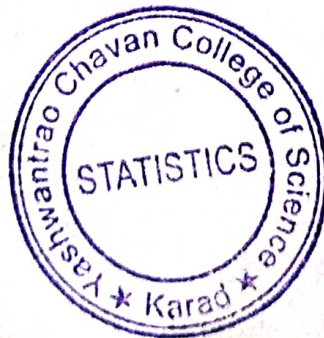
https://www.colorado.edu/amath/sites/default/files/attached-files/lesson3_probdistns.pdf



Attendance sheet

Date: 22/10/2020

Roll No.	Name of Student	Sign
3041	GHOLAP KOMAL SUNIL	<u>Gholap</u>
3042	JADHAV PRIYANKA SHRIKANT	<u>Priyanka</u>
3043	KACHARE RUTUJA VASANT	<u>Rutuja</u>
3044	KARANDE SUNITA DNYANDEV	<u>Karande</u>
3045	MULLA SULTANA SADRUDDIN	<u>Mulla</u>
3046	PATIL MAYURI SHIVAJI	<u>Patil</u>
3047	PATIL MONIKA SANJAY	—
3048	PAWAR SAMIKSHA SUNIL	<u>Samiksha</u>
3049	POL DHAIRYASHIL ASHOK	<u>Pol</u>
3050	SALUNKHE SALONI NIVAS	<u>Salunkhe</u>
3051	SANGAVE DHANASHRI TUKARAM	<u>Sangave</u>
3052	SHINDE MANJUSHA SUDHAKAR	<u>Shinde</u>
3053	SHINDE MAYURI SURESH	<u>Shinde</u>
3054	SONAWALKAR PRAGATI VISHWAS	—
3055	THORAT SHIVANI RAJARAM	<u>Thorat</u>
3056	YADAV JAGRUTI DHANANJAY	—
3057	YADAV SHUBHAM SAMPATRAO	<u>Yadav</u>



Statistical YouTube video lecture

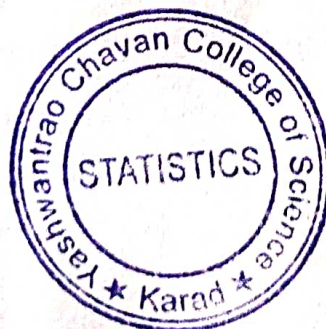
Statistics and Society

(<https://www.youtube.com/watch?v=I-3tS1Kg3pc&pp=ygUOYW5pbCBnb3JlIHNOYXQ%3D>Attendance sheet)

3tS1Kg3pc&pp=ygUOYW5pbCBnb3JlIHNOYXQ%3DAttendance sheet)

Date: 15/04/2021

Roll No.	Name of Student	Sign
2041	CHAVAN ASHWINI VITTHAL	<u>(Cholap)</u>
2042	CHAVAN PRAJAKTA GANPATI	
2043	GHOLAP KOMAL SUNIL	<u>(Kholap)</u>
2044	GOUD NIRAJ CHEDILAL	<u>(Goud)</u>
2045	JADHAV PRIYANKA SHRIKANT	
2046	JAGDALE KAUMUDI SANJAY	<u>(Jagdale)</u>
2047	KACHARE RUTUJA VASANT	<u>(Kachare)</u>
2048	KARANDE SUNITA DNYANDEV	<u>(Karande)</u>
2049	KOLI ANJALI ARJUN	<u>(Koli)</u>
2050	MULANI ASMA KABIL	<u>(Mulane)</u>
2051	MULLA SULTANA SADRUDDIN	<u>(Mulla)</u>
2052	PATIL MAYURI SHIVAJI	<u>(Patil)</u>
2053	PATIL MONIKA SANJAY	<u>(Patil)</u>
2054	PAWAR PRAJAKTA SHAHAJI	
2055	PAWAR SAMIKSHA SUNIL	<u>(Samiksha)</u>
2056	POL DHAIRYASHIL ASHOK	<u>(Pol)</u>
2057	SALUNKHE SALONI NIVAS	<u>(Salunkhe)</u>
2058	SANGAVE DHANASHRI TUKARAM	
2059	SHINDE MAYURI SURESH	<u>(Shinde)</u>
2060	SONAWALKAR PRAGATI VISHWAS	
2061	THORAT SHIVANI RAJARAM	<u>(Thorat)</u>



(Signature)

Teacher incharge

(Khochare P.T.)

Yashwantrao Chavan College of Science ,Karad

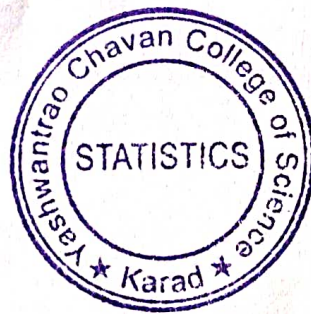
Department of Statistics

ICT record (2020-21)

E Notes

Link:

<https://archive.nptel.ac.in/courses/111/105/111105043/>



Yashwantrao Chavan College of Science ,Karad

Department of Statistics

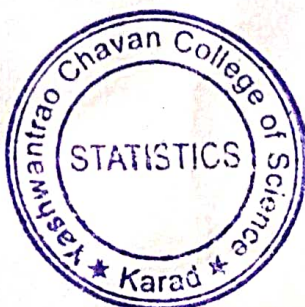
ICT record (2019-20)

PPT lecture on Parametric Testing (B.Sc.II) by Miss. M.P. Chavan

Attendance sheet

Date: 23/01/2020

Roll No.	Name of Student	Sign
2041	CHAVAN ASHWINI VITTHAL	<u>Achavan</u>
2042	CHAVAN PRAJAKTA GANPATI	<u>Prajakta Ch.</u>
2043	GHOLAP KOMAL SUNIL	<u>Gholap.</u>
2044	GOUD NIRAJ CHEDILAL	—
2045	JADHAV PRIYANKA SHRIKANT	<u>Jadhav</u>
2046	JAGDALE KAUMUDI SANJAY	<u>Jagdale</u>
2047	KACHARE RUTUJA VASANT	<u>Rutuja</u>
2048	KARANDE SUNITA DNYANDEV	<u>Karnade</u>
2049	KOLI ANJALI ARJUN	<u>Akeli</u>
2050	MULANI ASMA KABIL	<u>Mulani</u>
2051	MULLA SULTANA SADRUDDIN	<u>Mulla</u>
2052	PATIL MAYURI SHIVAJI	<u>MPatil.</u>
2053	PATIL MONIKA SANJAY	<u>mpati I.</u>
2054	PAWAR PRAJAKTA SHAHAJI	<u>Pawar prajakta.</u>
2055	PAWAR SAMIKSHA SUNIL	<u>Pawar</u>
2056	POL DHAIRYASHIL ASHOK	<u>Pol.</u>
2057	SALUNKHE SALONI NIVAS	—
2058	SANGAVE DHANASHRI TUKARAM	<u>D.S.T.</u>
2059	SHINDE MAYURI SURESH	<u>Shinde</u>
2060	SONAWALKAR PRAGATI VISHWAS	<u>Ps.</u>
2061	THORAT SHIVANI RAJARAM	<u>Shivani</u>



Yashwantrao Chavan College of Science ,Karad
Department of Statistics
ICT record (2019-20)

Statistical YouTube video lecture

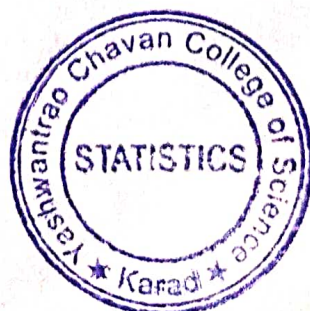
Basic Statistics by using MS- Excel

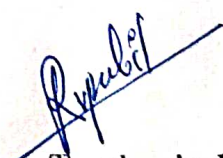
(<https://www.youtube.com/watch?v=qJR8OMQP3vw&pp=ygUWU3RhdGlzdGljcyB1c2luZyBleGNlbA%3D%3D>)

Attendance sheet

Date: 22/08/2020

Roll No.	Name of Student	Sign
2041	CHAVAN ASHWINI VITTHAL	Achavan
2042	CHAVAN PRAJAKTA GANPATI	Prajakta
2043	GHOLAP KOMAL SUNIL	Gholap
2044	GOUD NIRAJ CHEDILAL	Niraj
2045	JADHAV PRIYANKA SHRIKANT	Jadhav
2046	JAGDALE KAUMUDI SANJAY	Jagdale
2047	KACHARE RUTUJA VASANT	Rutuja
2048	KARANDE SUNITA DNYANDEV	Karande
2049	KOLI ANJALI ARJUN	Koli
2050	MULANI ASMA KABIL	Mulani
2051	MULLA SULTANA SADRUDDIN	—
2052	PATIL MAYURI SHIVAJI	Patil
2053	PATIL MONIKA SANJAY	Patil
2054	PAWAR PRAJAKTA SHAHAJI	Pawar
2055	PAWAR SAMIKSHA SUNIL	Pawar
2056	POL DHAIRYASHIL ASHOK	Pol
2057	SALUNKHE SALONI NIVAS	Salunkhe
2058	SANGAVE DHANASHRI TUKARAM	—
2059	SHINDE MAYURI SURESH	Shinde
2060	SONAWALKAR PRAGATI VISHWAS	PS
2061	THORAT SHIVANI RAJARAM	Shivani




Teacher incharge
(Miss. R.V.Patil)

Yashwantrao Chavan College of Science ,Karad

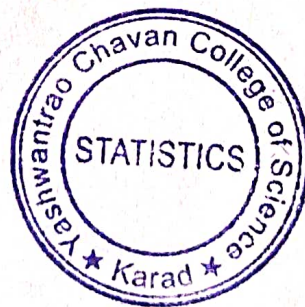
Department of Statistics

ICT record (2019-20)

E Notes : Statistical Inference

Link:

<https://archive.nptel.ac.in/courses/111/105/111105043/>



Yashwantrao Chavan College of Science ,Karad

Department of Statistics

ICT record (2018-19)

PPT lecture on R software by Dr.V.B.Jagadale

Attendance sheet

Date: 16/8/2018

Roll No.	Name of Student	Sign
3061	BHOSALE NIKITA PRAKASH	N.Bhosale.
3062	DHOTRE AJAY PRAKASH	A.Dhotre.
3063	GADHAVE APARNA CHANDRAHAR	A.Gadhave.
3064	GAIKWAD PRAJAKTA PRAVIN	—
3065	GHATAGE SAYALI SUNIL	S.Ghatage
3066	GHODVIL RAHUL BABURAV	R.W.
3067	GHONE GOURI MILIND	G.M.Ghone
3068	GODASE AMRUTA MAHESH	A.Godase
3069	JADHAV POONAM POPAT	P.P.Jadhav
3070	JADHAV RANI JAGANNATH	R.Jadhav
3071	JAGADALE PRATIKSHA PRAKASH	P.K.Jagdale
3072	KARAPE TEJASHRI ARJUN	T.Karape
3073	KUMBHAR MRUNAL HARIVIVEK	M.K.Kumbhar
3074	MAHADIK POOJA SHAMRAO	P.Mahadik
3075	MOHITE SUPRIYA SANJAY	S.Mohite
3076	MORE AAKANKSHA MARUTI	A.More
3077	MULLA SAHIL SALIM	S.Mulla
3078	NAKATE PRAJAKTA GANGARAM	P.Nakate
3079	PATIL AISHWARYA DIPAK	—
3080	PAWAR SUPRIYA RAJARAM	—
3081	PAWAR AISHWARYA ASHOK	A.Pawar
3082	PAWAR SHRUTIKA SHANKAR	S.Pawar
3083	PAWAR SHUBHAM VILAS	—
3084	PAWAR SUHAS TANAJI	S.Pawar
3085	PISAL GITNANJALI SANJAY	G.Pisal
3086	SAKAT NAMRATA SHANKAR	N.Sakat
3087	SHAIKH SANA IRFAN	S.Shaikh
3088	SHINDE HARSHADA PRABHAKAR	H.Shinde
3089	SHINDE SHAILAJA GAJANAN	S.Shinde
3090	SURYAWANSHI PRAGATI ASHOK	P.Suryawanshi
3091	THORAT ANKITA SURENDRA	A.Thorat
3092	WASKAR BHANUDAS KRUSHNA	—
3093	YADAV TEJAL SAMBHAJI	T.Yadav

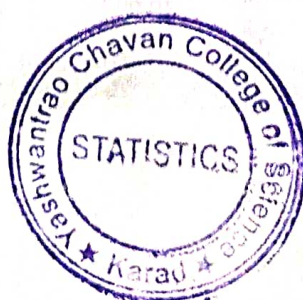


Yashwantrao Chavan College of Science, Karad
Department of Statistics
ICT record (2018-19)

Statistical YouTube video lecture
The Use of Statistics in the Pharmaceutical Industry
(https://youtu.be/lk7TNSvoqug?si=JxzQ34dxOW0S_rKA)
Attendance sheet

Date: 6/3/2019

Roll No.	Name of Student	Sign
3061	BHOSALE NIKITA PRAKASH	N Bhosale.
3062	DHOTRE AJAY PRAKASH	A Dhotre.
3063	GADHAVE APARNA CHANDRAHAR	—
3064	GAIKWAD PRAJAKTA PRAVIN	P Gaiwad.
3065	GHATAGE SAYALI SUNIL	S Ghatage.
3066	GHODVIL RAHUL BABURAV	R Ghodvile.
3067	GHONE GOURI MILIND	G. M. Ghone.
3068	GODASE AMRUTA MAHESH	G. Godase.
3069	JADHAV POONAM POPAT	P. Jadhav.
3070	JADHAV RANI JAGANNATH	R. Jadhav.
3071	JAGDALE PRATIKSHA PRAKASH	P. Jagdale.
3072	KARPE TEJASHRI ARJUN	T. Karpe.
3073	KUMBHAR MRUNAL HARIVIVEK	M. Kumbhar.
3074	MAHADIK POOJA SHAMRAO	P. Mahadik.
3075	MOHITE SUPRIYA SANJAY	S. Mohite.
3076	MORE AAKANKSHA MARUTI	—
3077	MULLA SAHIL SALIM	M. Mulla.
3078	NAKATE PRAJAKTA GANGARAM	P. Nakate.
3079	PATIL AISHWARYA DIPAK	A. Patil.
3080	PAWAR SUPRIYA RAJARAM	S. Pawar.
3081	PAWAR AISHWARYA ASHOK	A. Pawar.
3082	PAWAR SHRUTIKA SHANKAR	S. Pawar.
3083	PAWAR SHUBHAM VILAS	S. Pawar.
3084	PAWAR SUHAS TANAJI	S. Pawar.
3085	PISAL GITNANJALI SANJAY	G. Pisal.
3086	SAKAT NAMRATA SHANKAR	N. Sakat.
3087	SHAIKH SANA IRFAN	S. Shaikh.
3088	SHINDE HARSHADA PRABHAKAR	H. Shinde.
3089	SHINDE SHAILAJA GAJANAN	S. Shinde.
3090	SURYAWANSHI PRAGATI ASHOK	P. Suryawansi.
3091	THORAT ANKITA SURENDRA	A. Thorat.
3092	WASKAR BHANUDAS KRUSHNA	—
3093	YADAV TEJAL SAMBHAJI	T. Yadav.



Teacher incharge

(Dr. V. B. Jagdale)

Yashwantrao Chavan College of Science ,Karad

Department of Statistics

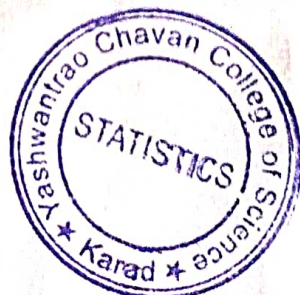
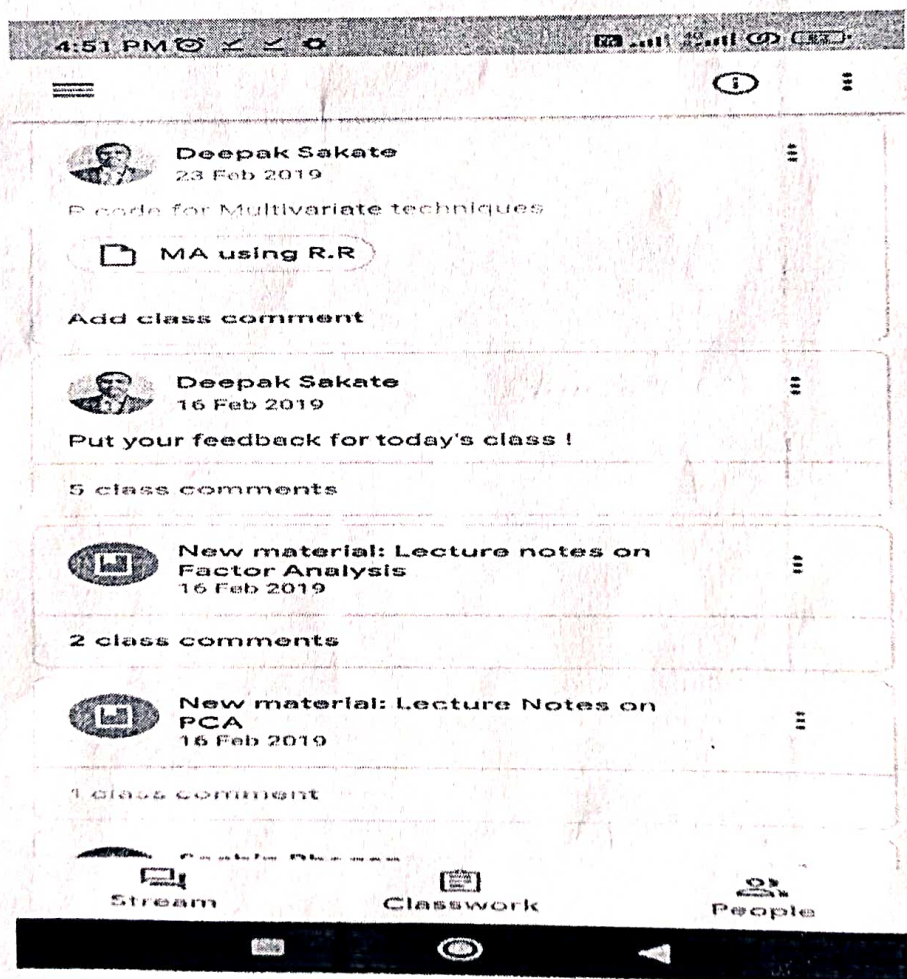
ICT record (2018-19)

E Notes : Statistical Inference

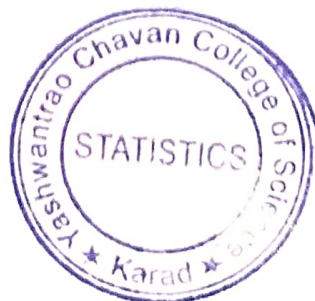
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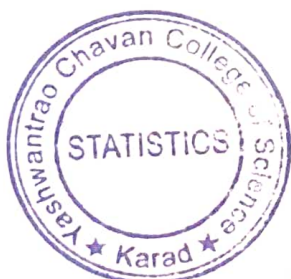
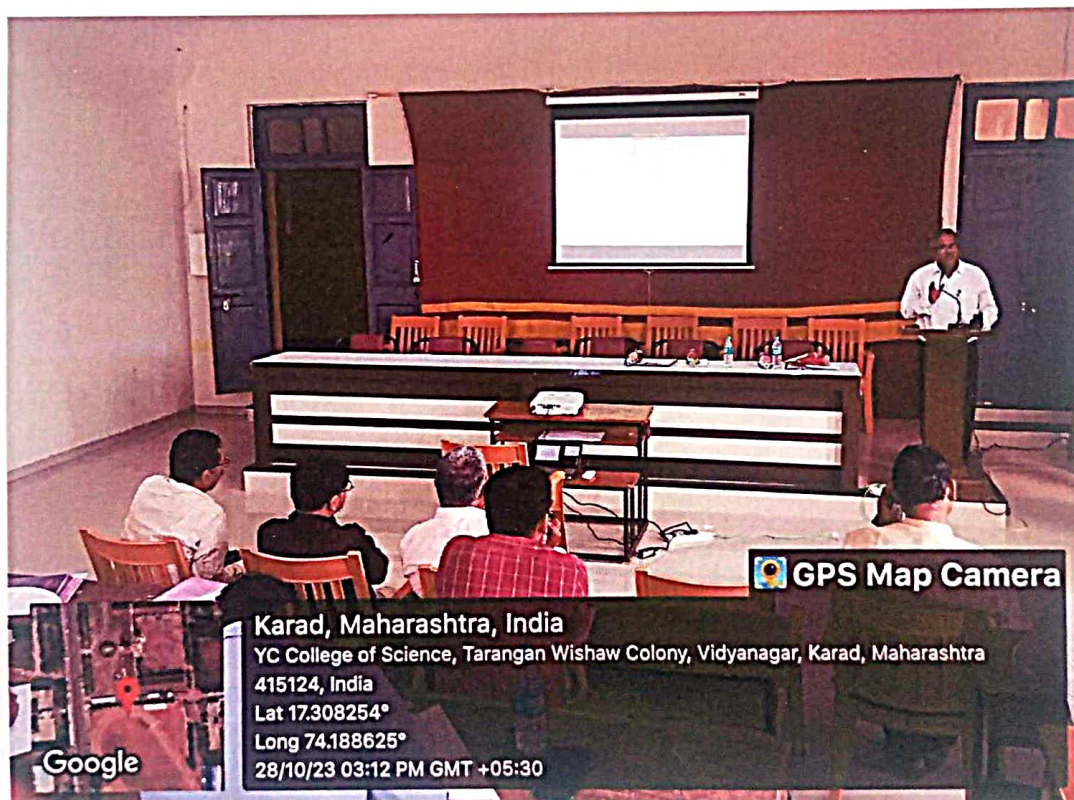
<https://archive.nptel.ac.in/courses/111/105/111105043/>

Google Classroom notes:



Guest lectures





Google

HEAD

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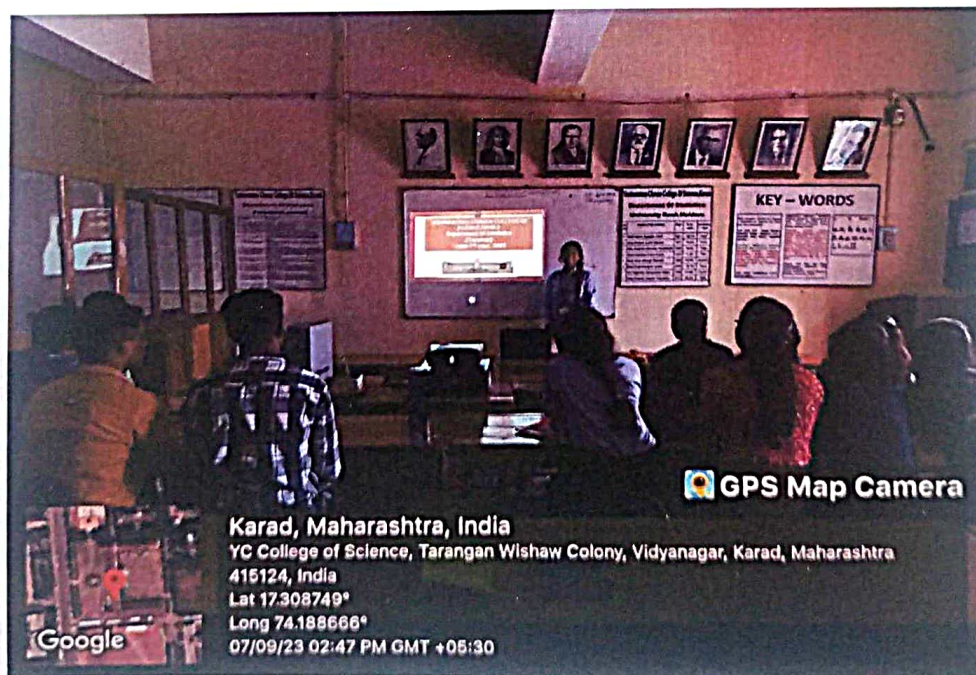
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Principal

Yashwantrao Chavan College of Science
 Karad

Seminar of Students





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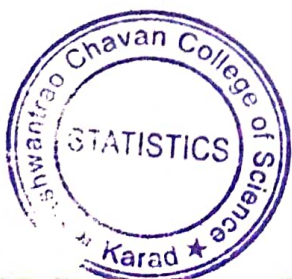
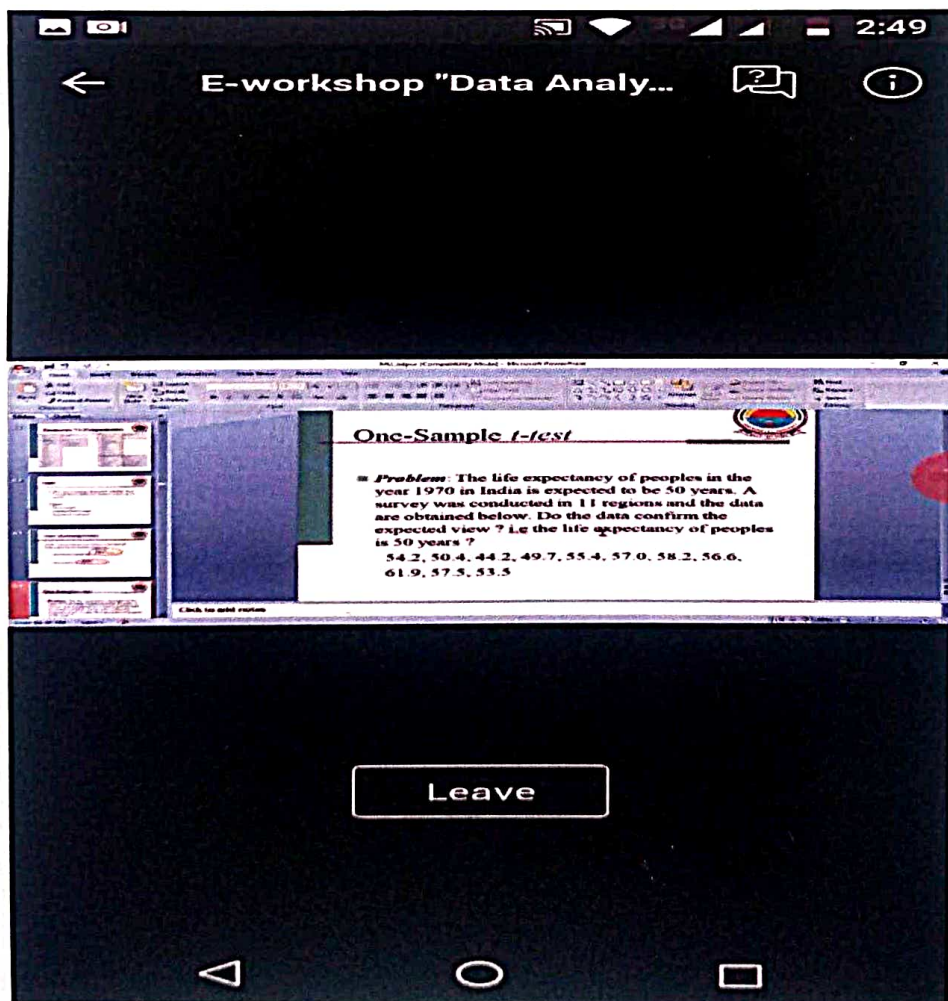
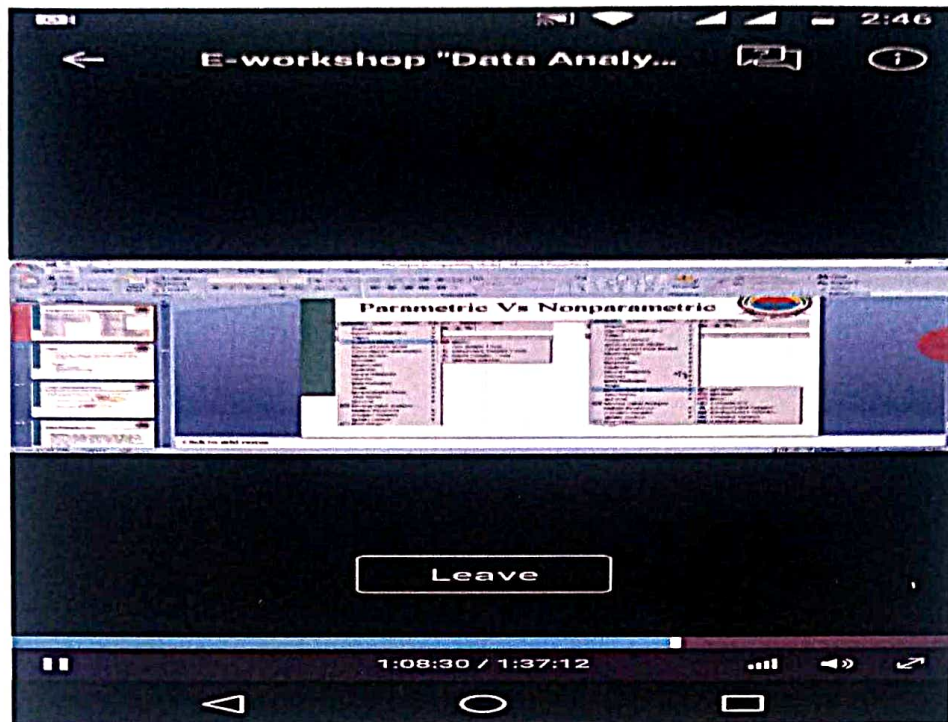
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 Principal

Yashwantrao Chavan College of Science
 Karad

E- Workshop



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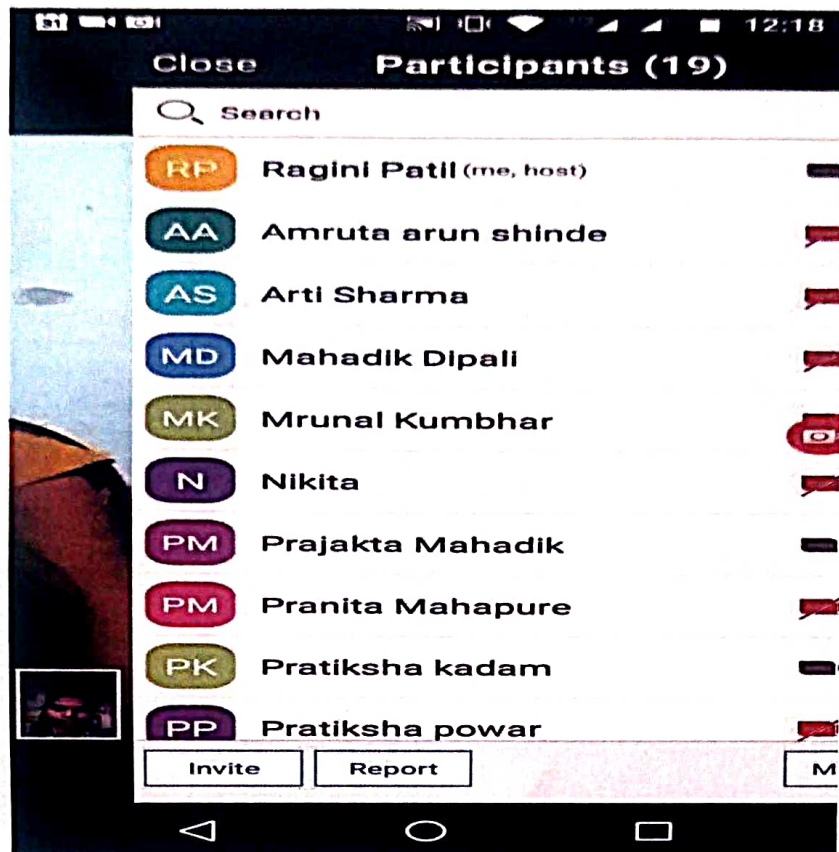
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Karad

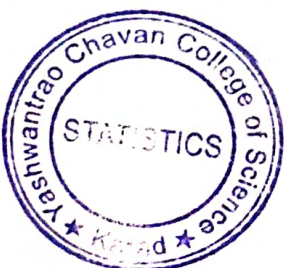
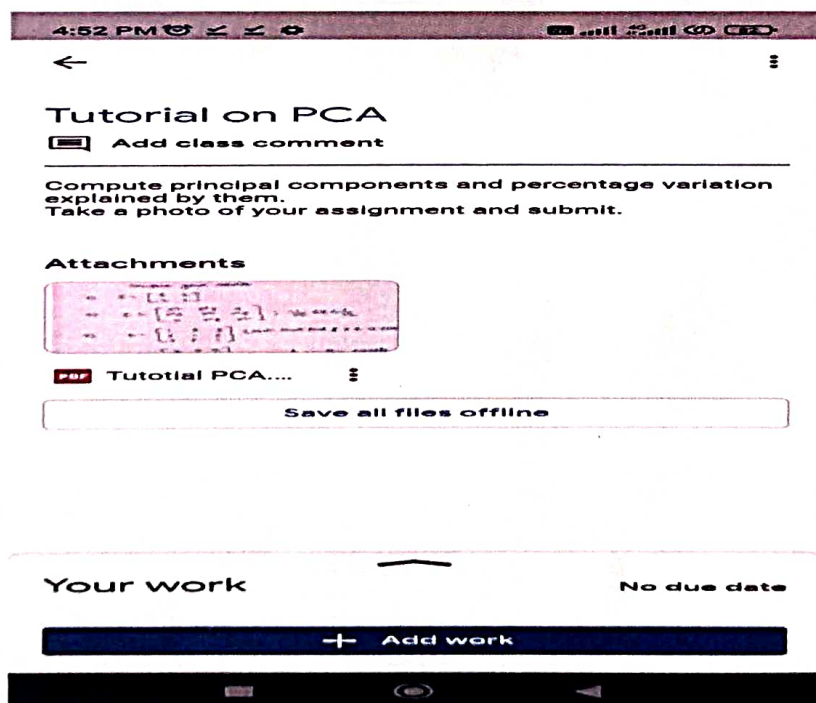
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Yashwantrao Chavan College of Science
Karad

lectures on zoom platform



Google Classroom record



Gwul

HEAD

Department of Statistics
Yashwantrao Chavan College of Science,
Karad

[Signature]

Principal
Yashwantrao Chavan College of Science
Karad

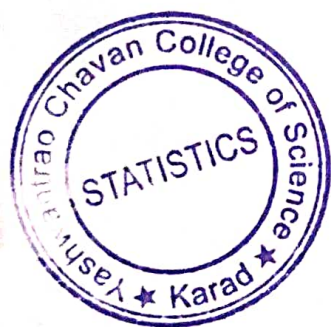
WhatsApp links of Department of Statistics

Class	Links
B.Sc.I	https://chat.whatsapp.com/KfcAIQ66M217SRf8x7fEgK
B.Sc.II	https://chat.whatsapp.com/Dkg1k9WhVk66D9LacPNwbb
B.Sc.III	https://chat.whatsapp.com/EEcBRrNKA813J4BXoZsfPi

Google class room links

<https://classroom.google.com/c/NjYxNDk3NDI2NjI3?cjc=6vvche>

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Normal Distribution

TOPIC OUTLINE

- The Normal Distribution
 - 1) Introduction
 - 2) Definition of Terms and Statistical Symbols Used
 - 3) How To Find Areas Under the Normal Curve
 - 4) Finding the Unknown Z represented by Z_0
 - 5) Examples
- Hypothesis Testing

The Normal Distribution

- Introduction

Before exploring the complicated Standard Normal Distribution, we must examine how the concept of Probability Distribution changes when the Random Variable is Continuous.

The Normal Distribution

- Introduction

A Probability Distribution will give us a Value of $P(x) = P(X=x)$ to each possible outcome of x . For the values to make a Probability Distribution, we needed two things to happen:

1. $\sum P(x) = P(X=x)$
2. $0 \leq P(x) \leq 1$

For a Continuous Random Variable, a Probability Distribution must be what is called a Density Curve. This means:

1. The Area under the Curve is 1.
2. $0 \leq P(x)$ for all outcomes x .

The Normal Distribution

- Introduction: Example:

Suppose the temperature of a piece of metal is always between 0°F and 10°F . Furthermore, suppose that it is equally likely to be any temperature in that range. Then the graph of the probability distribution for the value of the temperature would look like the one below:

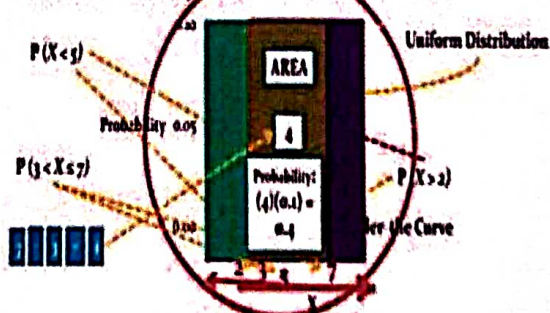


Illustration of the fundamental fact about DENSITY CURVE



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The Normal Distribution: Definition of Terms and Symbols Used

• Normal Distribution Definition:

- 1) A continuous variable X having the symmetrical, bell shaped distribution is called a Normal Random Variable.
- 2) The normal probability distribution (Gaussian distribution) is a continuous distribution which is regarded by many as the most significant probability distribution in statistics particularly in the field of statistical inference.

• Symbols Used:

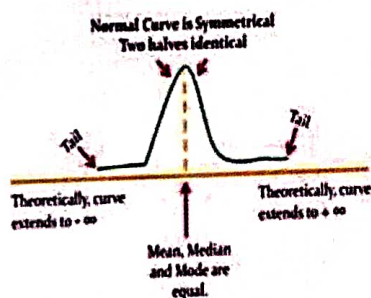
- " z " - z -scores or the standard scores. The table that transforms every normal distribution to a distribution with mean 0 and standard deviation 1. This distribution is called the **standard normal distribution** or simply **standard distribution** and the individual values are called **standard scores** or the **z -scores**.
- " μ " - the Greek letter "mu," which is the Mean, and
- " σ " - the Greek letter "sigma," which is the Standard Deviation

The Normal Distribution: Definition of Terms and Symbols Used

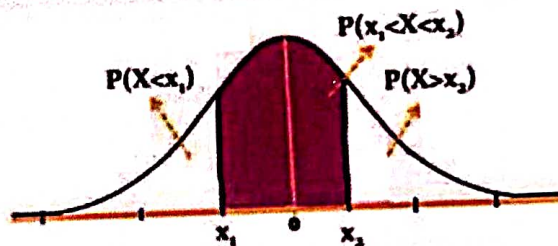
• Characteristics of Normal Distribution:

- 1) It is "Bell-Shaped" and has a single peak at the center of the distribution.
- 2) The arithmetic Mean, Median and Mode are equal.
- 3) The total area under the curve is 1.00; half the area under the normal curve is to the right of this center point and the other half to the left of it.
- 4) It is Symmetrical about the mean.
- 5) It is Asymptotic: The curve gets closer and closer to the X -axis but never actually touches it. To put it another way, the tails of the curve extend indefinitely in both directions.
- 6) The location of a normal distribution is determined by the Mean, μ , the Dispersion or spread of the distribution is determined by the Standard Deviation, σ .

The Normal Distribution: Graphically



AREA UNDER THE NORMAL CURVE



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