Govt. Degree College Udhampur Recognized by University Grant Commission (UGC) with 2(f) and 12 (b), Affiliated to University of Jammu

## DEPARTMENT OF STATISTICS

## DEPARTMENTAL PROFILE OF DEPARTMENT OF STATISTICS

- Year of establishment: 2010
- Posts sanctioned (Teaching/ Non-teaching): 01
- Present position of posts: 01
- Programmes offered like UG, PG: UG
- Vision and Mission of the Department: To orient and train the students on designed curriculum which is symbiosis of theoretical Statistical Knowledge with flavour of practical applications.
- Futuristic approach: To develop socially responsible Statisticians and to generate better employment opportunities.


## DEPARTMENTAL FACILITIES

- No. of Labs available for science departments: 01
- Name and number of major equipment's available for students: 23 Calculators
- No of computers available in the department for staff: Nil
- Internet facility :Yes
- ICT Enabled class rooms and labs availability: Nil
- Detail of books available in library related to your subject: 74
- No. of Journals in hard copy form: Nil
- No. of e-books and e-Journals available through library related to your subject: 130


## Teaching Staff

- No of sanction posts: 01
- Present status:01+01 (Academic Arrangement)

| Name of the Faculty | Designation | Qualification | Specialization |
| :--- | :--- | :--- | :--- |
| Dr. Ankush Bharti | Assistant Professor | M.Phil, Ph.D | Reliability Theory |
| Dr. Ankita Sharma | Lecturer | M.Phil, Ph.D | Information Theory |

## Supporting staff

- Sanctioned strength : NA
- Present Position: 01

| Name of the supporting stafif | Designation |
| :--- | :--- |
| Sh. Murli Manohar Lal | Working as a Lab bearer |
|  |  |

## Additional Responsibilities Shared By Staff Members

| Name of the faculty member | Additional responsibilities shared (Different <br> committees/assignments) |
| :--- | :--- |
| 1. Dr. Ankush Bharti | Acted as member in various committees <br> established by college namely, <br> admission committee, I.Q.A.C, purchase <br> committee, carrier counselling <br> committee, website/ internet committee, <br> disciplinary committee \& examination |
| 2. Dr. Ankita Sharma | Disciplinary Committee and <br> examination |

## Objectives of The Department

- Followed academic calendar
- Time Table - Followed college time table.
- Examination Details: As per University guidelines.
- Curricular Aspects Like:
a. Curriculum designing: Framed syllabi of B.Sc./ B.A statistics of Jammu University and cluster university of Jammu with the support of other members of the Board of Studies.
b. Academic flexibility: Oriented the students about applicability of statistical tools and concepts in real life situations.


## Students Participation in Different Competitions from the Department:



## Different Activities Organized by the Department and its Outcome:

| Activities Organised By Department | Resource Person | Outcome |
| :--- | :--- | :--- |
| A session on "Google products and services <br> explicitly on designing of Google forms" to <br> conduct survey and its analysis | Prof. Rachna Bharti <br> Department of Computer <br> Application | Students got more knowledge and ease in <br> conducting surveys and making analyses so <br> that they can enhance their research abilities. |
| Network Security | Prof. Rakesh Sharma <br> Department of Computer <br> Application | Students become aware about protecting <br> sensitive and confidential information from <br> unauthorised access and attackers, like hacker <br> and viruses. |
| A lecture on Entrepreneurial skills among <br> students | Dr. Vipul Chalotra | Students got new insights about entrepreneurial <br> skills and this enhanced risk taking and <br> innovative capability among them. |
| Role of Communication skills for in <br> organisational effectiveness | Dr. Jyoti Sharma | This made the students able to understand the <br> significance of communication skills, |
| problems associated with communication and |  |  |
| their solutions |  |  |

Any event organized by the students of the department:
Students have voluntarily organised programmes i.e. :

- Poster making event for the beautification of the lab.
- Cleanliness drive in the college premises.

Conference/Workshops/Seminars : Attended by Dr. Ankita Sharma
(M.Phil. and Ph.D.)

| 2021 | 2020 | 2019 |
| :---: | :---: | :---: |
| -One week virtual International Lecture Workshop On "New Advances in Mathematical and Computation Sciences " Organized by the Department of Applied Mathematics, Yogi Vemana University Kadapa A.P., India 2021 | - Sixth International Conference on Statistics for Twenty-First Century2020 Organized by the Department of Statistics, University of Kerala in association with American Statistical Association, on Dec 16-19, 2020. <br> - National Webinar on Putting the Brakes on Covid -19: How to Safeguard the Health and Rights of Women and Girls Now, Organized by Faculty Mathematics and Computing Banasthali Vidyapith on the occasion of world population Day, July 11, 2020. | -14JK Science Congress/National Conference, on held at Jammu, during Dec, 20-22, 2019. <br> -International Conference on Analysis and its Applications, on held at Jammu, during Dec, 16-18, 2019. <br> - One week National Workshop on Data Analysis through R , held in university of Jammu, Nov, 25-30, 2019. <br> - One Day National Workshop on Gender Sensitization, held in university of Jammu, Nov, 22, 2019 |

## Conference/Workshops/Seminars: Attended by Ankita Sharma

## (M.Phil. and Ph.D.)

| 2020 | 2019 | 2018 |
| :---: | :---: | :---: |
| 3. National web based seminar on Recent Trends in Statistical Theory and Applications 2020 webinar organized by Indian society for Probability and Statistics (ISPS), Kerala Statistical Association and the Department of Statistics, University of Kerala, Trivandrum on June 29-July 01,2020 <br> 4. Certificate Program on Data Analysis in R using STATCRAFT, on 02-04 June 2020. | 5. National mathematics Research Scholar Meet, on held at Jammu, during August, 20-22, 2019 <br> 6. International Conference of IAPS(CONIAPSXXIV) Innovation in Physical Sciences, on held at Meeurt, U.P during August, 10-12, 2019 <br> 7. $28^{\text {th }}$ Annual conference of Jammu Mathematical Society and a National Seminar on Complex analysis and Operation theory on held at Jammu, during March, 28-30, 2019 | 1. $20^{\text {th }}$ International Conference of Forum For Interdisciplinary Mathematics in Conjunction with third Convention of IARS on held at Jammu, during November,02-04, 2018 <br> 2. Two day Workshop on Research Methodology held in university of Jammu during May 24-25, 2018 <br> 3. International Conference on Science and Technology : trends and challenges held at Ludiyana, during April,16-18, 2018. |

Conference/Workshops/Seminars : Attended by Ankita Sharma (M.Phil. and Ph.D.)

## 2018

2017

- Emerging Trends in Advanced Computing and

Information Technology held at Kathua Campus University of Jammu during feb 24-25, 2018.

- One Week Work shop on Statistics through SPSS and R held in University of Jammu during feb 19-24, 2018.
-27 ${ }^{\text {th }}$ annual Conference of the Jammu Mathematical Society held at University of Jammu, during Feb 1517, 2018
- Meaning the Mean: Story of Administrative Statistics" on Statistics Day Organized by National Sample Survey Office 2017
-Delivered Lecture on "Role of Statistics in Improving Status of Agriculture" on Statistics Day Organized by National Sample Survey Office 2017.
- $18^{\text {th }}$ Annual Conference of Society of Statistics, Computer and Applications held at University of Jammu during Feb 18-20, 2017


## Publications:

| 2021 | 2020 | 2019 |
| :---: | :---: | :---: |
| - Enhanced Estimators of Population Variance with the use of Supplementary Information in Survey Sampling. Mathematical Problems in Engineering. Vol.1, 1-8, 2021. | - Estimation of Density and Reliability Function of Inverse Lomax Distribution under Type-II Censoring Scheme and the Sampling Scheme of Bartholomew. International Journal of Applied Mathematics and Statistics. Vol 59(2), 1-21(2020). | - Prediction of Anaemia among Children using Machine Learning Algorithms. International Journal of Electronics Engineering. Vol 11(2), 417-421(2019). |
| -Bayesian and E-Bayesian Estimation of <br> Parameters of Inverse Lomax <br> Distribution under Type-II Censoring <br> Scheme. Journal of Statistical <br> Applications and Probability. Vol.1, 85102 (2021) | - Maximum Product Spacing Method of Estimation of Entropy of Log-Logistic Probability Distribution and their Order Statistics. International Journal of Statistics and Reliability Statistics. Vol 6(2), 133-144(2020). | -Entropy Estimation of Inverse Rayleigh Probability Distribution and its Order Statistics. International Journal of Electronics Engineering. Vol 11(2), 508513(2019). |

## Publications:

| 2018 | 2017 | 2016 |
| :---: | :---: | :---: |
| -Effect of female Literacy on Gender Ratio among Scheduled Cast and tribes of J\&K State India. International Journal of Research in Management and Social Science. Vol 6(1), 8894(2018). <br> -Risk and Prevalence of Thyroid Disorder among Indian Population: A meta-analysis. International Journal of Recent Trends in Science and Technology. Vol26(2),16-20 (2018) | -Prevalence of Thyroid Disease among the Pregnant Women's: A MetaAnalysis. International Journal for Innovative Research in Multidisciplinary Field. Vol 3, 2455620 (2017). <br> -Prevalence of Thyroid Disease among the Diabetic Patients: A Meta Analysis. Journal of Medical Science and Clinical Research. Vol 5(6), 2338523389 (2017) | -Jammu and Kashmir: A Paradise on Earth and the other Side of the Story!. International Journal of Research in Social Sciences. Vol 6(8), 33-40.(2016) <br> -Effect of Female Literacy on Gender Ratio: A Boon or Bane? Researcher. Vol 9(1), 71-87(2015). |


| Name of the Faculty with Qualification | Details of Workshops, Conferences, Other <br> Programs |
| :--- | :--- |
| Dr. Ankush Bharti <br> (M.Phil. and Ph.D) | 1. Programme on "Emerging Technologies for Education <br> and Research in CS and IT". Organized by Institute of <br> Computer Applications and Management, New Delhi in <br> 2020. |
|  | 2. Seven Days International Workshop on "Career <br> Awareness and Role of Physical Education for Healthy <br> Lifestyle" Organized by G.D.C Ramnagar in <br> collaboration with PEFI India in 2020. |


| Name of the Faculty with Qualification | Details of Workshops, Conferences, Other <br> Programs |
| :--- | :--- |
| Dr. Ankush Bharti <br> (M.Phil. and Ph.D) | 3. Four Week Induction/Orientation Programme for "Faculty in <br> Universities/Colleges/Institutes of Higher Education" organized <br> by Teaching Learning Centre, Ramanujan College, University of <br> Delhi Under the ages of MHRD PMMMNMTT in 2020. |
|  | 4. Five Days FDP on "Recent Trends in Digital Technologies". <br> Organized by The American College Madurai. 2020 |
|  | 5. Two Weeks Online Faculty Development Programme on <br> "Emerging Technologies for Education and Research in CS and <br> IT". Organized by Bharati Vidyapeeth's Institute of Computer <br> Applications and Management, New Delhi 2020 |
|  |  |
|  |  |


| Name of the Faculty with Qualification | Details of Workshops, Conferences, Other <br> Programs |
| :--- | :--- |
| Dr. Ankush Bharti <br> (M.Phil. and Ph.D.) | 6. One week FDP-cum-Workshop on "Personality <br> Development and Communication Skills". Organized <br> by G.D.C Udhampur, 2019 |
|  | 7.Global Warming: Threat to Mankind presentation <br> in G.D.C Udhampur, 2019. |

## Enrolment of the students year wise

| Semesters |  | 2018-19 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Boys | Girls |
| $1^{\text {st }}$ | Descriptive Statistics and Probability Theory | 30 | 27 | 03 |
| $2^{\text {nd }}$ | Descriptive Statistics and Probability Distributions | 30 | 27 | 03 |
| $3^{\text {rd }}$ | Statistical Inference | 43 | 26 | 17 |
| $4^{\text {th }}$ | Sampling Design | 43 | 26 | 17 |
| $5^{\text {th }}$ | Applied Statistics-I | 13 | 09 | 04 |
| $6^{\text {th }}$ | Applied Statistics-II | 13 | 09 | 04 |


| Semesters | Course Name |  | 2019-20 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Descriptive Statistics and Probability Theory | Total | Boys | Girls |
| $1^{\text {st }}$ | Descriptive Statistics and Probability | 23 | 20 | 03 |
| $2^{\text {nd }}$ | Distributions |  | 20 | 03 |
| $3^{\text {rd }}$ | Statistical Inference | 20 | 17 | 03 |
| $4^{\text {th }}$ | Sampling Design | 20 | 17 | 03 |
| $5^{\text {th }}$ | Applied Statistics-I | 38 | 22 | 16 |
| $6^{\text {th }}$ | Applied Statistics-II | 38 | 22 | 16 |


| Semesters | Course Name | 2020-21 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Boys | Girls |
| $1{ }^{\text {st }}$ | Descriptive Statistics and Probability Theory | 21 | 10 | 11 |
| $2^{\text {nd }}$ | Descriptive Statistics and Probability Distributions | 21 | 10 | 11 |
| 3 rd | Statistical Inference | 12 | 11 | 01 |
| $4^{\text {th }}$ | Sampling Design | 12 | 11 | 01 |
| $5^{\text {th }}$ | Applied Statistics-I | 10 | 07 | 03 |
| 6th | Applied Statistics-II | 10 | 07 | 03 |

## Results

## 2016-2017

| Semester | Sem 1 $^{\text {st }}$ | Sem 2 $^{\text {nd }}$ | Sem 3 $^{\text {rd }}$ | Sem 4 $^{\text {th }}$ | Sem 5 | Sem 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| th |  |  |  |  |  |  |
| Results | $55 \%$ | $60 \%$ | $60 \%$ | $54 \%$ | $71 \%$ | $73 \%$ |

## 2017-2018

| Semester | Sem 1 $^{\text {st }}$ | Sem 2 $^{\text {nd }}$ | Sem 3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| rd | Sem 4 | Sem | Sem 6 |  |  |  |
| Results | $52 \%$ | $58 \%$ | $69 \%$ | $74 \%$ |  |  |


| 2018-2019 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Semester | Sem $1^{\text {st }}$ | Sem $2^{\text {nd }}$ | Sem 3 ${ }^{\text {rd }}$ | Sem $4^{\text {th }}$ | Sem $5^{\text {th }}$ | Sem $6^{\text {th }}$ |
| Results | 60\% | 65\% | 76\% | 78\% | 82\% | 84\% |


| 2019-2020 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Semester | Sem $1^{\text {st }}$ | Sem 2 ${ }^{\text {nd }}$ | Sem 3 ${ }^{\text {rd }}$ | Sem $4^{\text {th }}$ | Sem $5^{\text {th }}$ | Sem $6^{\text {th }}$ |
| Results | 54\% | 100\% | 62\% | 100\% | 88\% | 90\% |

2020-2021

| Semester | Sem $1^{\text {st }}$ | Sem $2^{\text {nd }}$ | Sem 3 ${ }^{\text {rd }}$ | Sem $4^{\text {th }}$ | Sem 5 ${ }^{\text {th }}$ | Sem $6^{\text {th }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Results | 100\% | 100\% | 100\% | 100\% | 100\% | 90\% |

## Student Progression

| S .No | Name | Course | Name of the Institute |
| :--- | :--- | :--- | :--- |
| 1 | Tavneet Kour | M.Sc (Mathematics) | SMVDU |
| 2 | Stuti Arora | B.Ed. | Katra College of Education |
| 3 | Rajat Koushal | M.Sc (Statistics) | Hemvati Nandan Bahuguna Garhwal University |
| 4 | Payal | M.A (English) | University of Jammu |
| 5 | Surbhi Sharma | M.A (English) | University of Jammu |
| 6 | Pallvi Dogra | M.Sc (Statistics) | University of Jammu |
| 7 | Priya Sharma | M.Sc (Statistics) | University of Jammu |
| 8 | Shallu Sharma | M.Sc (Statistics) | University of Jammu |
| 9 | Kritika Sharma | M.Sc (Statistics) | University of Jammu |
| 10 | Rahul Sharma | Govt. Employee | PHE department |
| 11 | Amandeep | Self employed | Business |
| 12 | Radha Rani | Self employed | Coaching center |

## Best Practices

- Students trainings/ co-curricular activities organized by your department/ field visits/ Internship etc.:

```
One day online symposium competition organised by department of statistics on the topic " Role of Statistics in Planning and Administration" as on 20 th of October 2020
```

- MOUs/Collaborations/Consultancy if any :

NA

- Start-up etc. :

NA

- Students Guidance (Mentor-mentee details):
- Any financial assistance to the needy students:

NA

- Contribution of Books or any learning material to library in hard copy form or digital form by alumni/ teachers:

NA

- Any other exceptional activity other than regular activities by different committees with proper report:


## Innovative initiatives by the Deptt.

Any special Initiative by the department useful for the college

- It may include any specific model for a common purpose:
- Any initiative for social reform like adoption of any nearby :

NA

Govt. School for encouraging students in different fields, any adoption effort for a slum or nearby village with special Purpose:

- Any specific innovation by student or teacher for the welfare of the society


## Teaching learning Methodology

| Leanning styles | Activitics |
| :---: | :--- |
| Participative learning | Seminars, <br> Presentation, <br> Quiz competition, <br>  <br> Speech, <br> Poster Making and Presentation |
|  |  |

## Mode of Assessment

$>$ INTERNAL EXAM
TheoryInternal Assessment test :Attendance:
Practical

1. Internal Practical :
Components of Internal Practical
Attendance:
Viva Voce:
Day to day Performance/ Practical work
Internal Written test
20 Marks
Minimum 75\%
25 Marks
5 Marks
5Marks
10 marks

## SWOC/SWOT ANALYSIS

## Departmental Strengths:

Dynamic teaching faculty
-Students participation in different seminars, art activities, essay competition etc.
-Students bought laurels in sports
-Good infrastructural facilities

## SWOC/SWOT ANALYSIS

## Departmental Opportunities:

-Should inculcate field visits in the curriculum to increase practical knowledge and applicability.
-Should introduce internship programs fro students
sshould organise practical knowledge based seminars, conferences, presentation for the students
-Should include software based practicals in the curriculum Like, SPSS, PLS, Statistica, etc.

## SWOC/SWOT ANALYSIS

## Departmental Challenges/ Threats:

Lack of awareness among parents and students regarding the significance of subject.

