# 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 staff	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 committees/assignments)
1. Dr. Ankush Bharti	Acted as member in various committees established by college namely, admission committee, I.Q.A.C, purchase committee, carrier counselling committee, website/ internet committee, disciplinary committee & examination
2. Dr. Ankita Sharma	Disciplinary Committee and 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:

Year	Name of the student	Class	Activity/ Rank
2020	Tavneet Kour	6 <sup>th</sup> Sem	1 <sup>st</sup> Rank (symposium)
	Pallvi Dogra	6 <sup>th</sup> Sem	2 <sup>nd</sup> Rank ( symposium )
	Sania	1 <sup>st</sup> Sem	2 <sup>nd</sup> Rank (symposium)
	Rahat Sharma	1 <sup>st</sup> Sem	3 <sup>rd</sup> Rank (symposium)
2021	Shubham Sharma	1 <sup>st</sup> Sem	Silver medal in Youth Games All India National Championship -2021
2021	Ishdeep Kour	1 <sup>st</sup> Sem	Participated in 44 Junior Girls National Handball Championship
2022	Ishdeep Kour	2 <sup>nd</sup> Sem	•Participated in 50 <sup>th</sup> Senior Women National Handball Championship •Participated in two days 9 <sup>th</sup> District Handball Championship

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

<b>Activities Organised By Department</b>	Resource Person	Outcome
A session on "Google products and services explicitly on designing of Google forms" to conduct survey and its analysis	Prof. Rachna Bharti Department of Computer Application	Students got more knowledge and ease in conducting surveys and making analyses so that they can enhance their research abilities.
Network Security	Prof. Rakesh Sharma Department of Computer Application	Students become aware about protecting sensitive and confidential information from unauthorised access and attackers, like hacker and viruses.
A lecture on Entrepreneurial skills among students	Dr. Vipul Chalotra	Students got new insights about entrepreneurial skills and this enhanced risk taking and innovative capability among them.
Role of Communication skills for in organisational effectiveness	Dr. Jyoti Sharma	This made the students able to understand the 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	Statistics for Twenty-First Century- 2020 Organized by the Department of Statistics, University of Kerala in association with American Statistical Association, on Dec 16-19, 2020.  National Webinar on Putting the Brakes on Covid -19: How to Safeguard the Health and Rights of Women and Girls	Conference, on held at Jammu, during Dec, 20-22, 2019.  •International Conference on Analysis and its Applications, on held at Jammu, during Dec, 16-18, 2019.  •One week National Workshop on Data Analysis through R, held in university of

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

(M.Phil. and Ph.D.)

2020	2019	2018
<ol> <li>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</li> <li>Certificate Program on Data Analysis in R using STATCRAFT, on 02-04 June 2020.</li> </ol>	<ul> <li>5. National mathematics Research Scholar Meet, on held at Jammu, during August, 20-22, 2019</li> <li>6. International Conference of IAPS(CONIAPS-XXIV) Innovation in Physical Sciences, on held at Meeurt, U.P during August, 10-12, 2019</li> <li>7. 28<sup>th</sup> 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</li> </ul>	<ol> <li>20<sup>th</sup> International Conference of Forum For Interdisciplinary Mathematics in Conjunction with third Convention of IARS on held at Jammu, during November,02-04, 2018</li> <li>Two day Workshop on Research Methodology held in university of Jammu during May 24-25, 2018</li> <li>International Conference on Science and Technology: trends and challenges held at Ludiyana, during April,16-18, 2018.</li> </ol>

# 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.	• Meaning the Mean: Story of Administrative Statistics" on Statistics Day Organized by National Sample Survey Office 2017
• One Week Work shop on Statistics through SPSS and R held in University of Jammu during feb 19-24, 2018.	•Delivered Lecture on "Role of Statistics in Improving Status of Agriculture" on Statistics Day Organized by National Sample Survey Office 2017.
•27 <sup>th</sup> annual Conference of the Jammu Mathematical Society held at University of Jammu, during Feb 15-17, 2018	• 18 <sup>th</sup> 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. <i>Mathematical Problems in Engineering</i> . 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. <i>International Journal of Applied Mathematics and Statistics</i> . Vol 59(2), 1-21(2020).	<ul> <li>Prediction of Anaemia among         Children using Machine Learning         Algorithms. International Journal of         Electronics Engineering. Vol 11(2),         417-421(2019).</li> </ul>
•Bayesian and E-Bayesian Estimation of Parameters of Inverse Lomax Distribution under Type-II Censoring Scheme. <i>Journal of Statistical</i> <i>Applications and Probability</i> . Vol.1, 85- 102 (2021)	•Maximum Product Spacing Method of Estimation of Entropy of Log-Logistic Probability Distribution and their Order Statistics. <i>International Journal of Statistics and Reliability Statistics</i> . Vol 6(2), 133-144(2020).	•Entropy Estimation of Inverse Rayleigh Probability Distribution and its Order Statistics. <i>International Journal of Electronics Engineering</i> . Vol 11(2), 508-513(2019).

## **Publications:**

1 doneations.		
2018	2017	2016
•Effect of female Literacy on Gender	•Prevalence of Thyroid Disease among	•Jammu and Kashmir: A Paradise on
Ratio among Scheduled Cast and tribes	the Pregnant Women's: A Meta-	Earth and the other Side of the
of J&K State India. International	Analysis. International Journal for	Story!. International Journal of
Journal of Research in Management	Innovative Research in	Research in Social Sciences. Vol
and Social Science. Vol 6(1), 88-	Multidisciplinary Field. Vol 3, 2455-	6(8), 33-40.(2016)
94(2018).	620 (2017).	
		<ul> <li>Effect of Female Literacy on</li> </ul>
•Risk and Prevalence of Thyroid	<ul> <li>Prevalence of Thyroid Disease among</li> </ul>	Gender Ratio: A Boon or Bane?
Disorder among Indian Population: A	the Diabetic Patients: A Meta Analysis.	Researcher. Vol 9(1), 71-87(2015).
meta-analysis. International Journal of	Journal of Medical Science and	
Recent Trends in Science and	Clinical Research. Vol 5(6), 23385-	
<i>Technology.</i> Vol26(2),16-20 (2018)	23389 (2017)	

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

	ams
(M.Phil. and Ph.D)  University by Teach Delhi University of the Information of the Inform	Week Induction/Orientation Programme for "Faculty in ties/Colleges/Institutes of Higher Education" organized ning Learning Centre, Ramanujan College, University of onder the ages of MHRD PMMMNMTT in 2020.  Days FDP on "Recent Trends in Digital Technologies". Ed by The American College Madurai. 2020  Weeks Online Faculty Development Programme on ong Technologies for Education and Research in CS and ganized by Bharati Vidyapeeth's Institute of Computer tions and Management, New Delhi 2020

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

## Enrolment of the students year wise

Semesters			2018-19				
		Total	Boys	Girls			
1 <sup>st</sup>	Descriptive Statistics and Probability Theory	30	27	03			
2 <sup>nd</sup>	Descriptive Statistics and Probability Distributions	30	27	03			
3 <sup>rd</sup>	Statistical Inference	43	26	17			
4 <sup>th</sup>	Sampling Design	43	26	17			
5 <sup>th</sup>	Applied Statistics-I	13	09	04			
6 <sup>th</sup>	Applied Statistics-II	13	09	04			

Semesters	Course Name	2019	0-20	
		Total	Boys	Girls
1 <sup>st</sup>	Descriptive Statistics and Probability Theory	23	20	03
2 <sup>nd</sup>	Descriptive Statistics and Probability Distributions	23	20	03
3 <sup>rd</sup>	Statistical Inference	20	17	03
4 <sup>th</sup>	Sampling Design	20	17	03
5 <sup>th</sup>	Applied Statistics-I	38	22	16
6 <sup>th</sup>	Applied Statistics-II	38	22	16

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

## **Results**

2016-2017						
Semester	Sem 1st	Sem 2 <sup>nd</sup>	Sem 3 <sup>rd</sup>	Sem 4 <sup>th</sup>	Sem 5 <sup>th</sup>	Sem 6 <sup>th</sup>
Results	55%	60%	60%	54 %	71%	73%

2017-2018						
Semester	Sem 1 <sup>st</sup>	Sem 2 <sup>nd</sup>	Sem 3 <sup>rd</sup>	Sem 4 <sup>th</sup>	Sem 5 <sup>th</sup>	Sem 6 <sup>th</sup>
Results	52%	58%	69%	74%	78%	84%

2018-2019						
Semester	Sem 1 <sup>st</sup>	Sem 2 <sup>nd</sup>	Sem 3 <sup>rd</sup>	Sem 4 <sup>th</sup>	Sem 5 <sup>th</sup>	Sem 6 <sup>th</sup>
Results	60%	65%	76%	78%	82%	84%

	2019-2020					
Semester	Sem 1 <sup>st</sup>	Sem 2 <sup>nd</sup>	Sem 3 <sup>rd</sup>	Sem 4 <sup>th</sup>	Sem 5 <sup>th</sup>	Sem 6 <sup>th</sup>
Results	54%	100%	62%	100%	88%	90%

#### 2020-2021

Semester	Sem 1 <sup>st</sup>	Sem 2 <sup>nd</sup>	Sem 3 <sup>rd</sup>	Sem 4 <sup>th</sup>	Sem 5 <sup>th</sup>	Sem 6 <sup>th</sup>
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<sup>th</sup> of October 2020

MOUs/Collaborations/Consultancy if any:

Start-up etc. :

Students Guidance (Mentor-mentee details):

Any financial assistance to the needy students:

Contribution of Books or any learning material to library in

hard copy form or digital form by alumni/ teachers:

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: NA

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

with valid supporting documents

NA

# Teaching learning Methodology

Learning styles	Activities
Participative learning	Seminars, Presentation, Quiz competition, Speech, Poster Making and Presentation

#### Mode of Assessment

- > INTERNAL EXAM
- > Theory

Internal Assessment test: 20 Marks

Attendance: Minimum 75%

#### **Practical**

Internal Practical:
 25 Marks

Components of Internal Practical

Attendance: 5 Marks

Viva Voce: 5Marks

Day to day Performance/ Practical work 10 marks

Internal Written test 5 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
- should 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.