#### GOVERNMENT DEGREE COLLEGE RAMGARH



# Department of Environmental Sciences

### **About College**





Government Degree College Ramgarh affiliated to University of Jammu was established in 2019 by Higher Education Department, Government of Jammu & Kashmir under the Patronage of Jenab Talat Parvez Rohella, Commissioner Secretary, Higher Education Department.

College is offering 11 Core subjects along with equal number of Skill Enhancement Courses to train students for leadership role in Local, National and Global Communities. We are proud of our Vision and Mission which represents long term commitment to prepare students for future perspective by imparting quality education.

We are emerging as an educational institution of excellence with flow of knowledge in all spheres of life so that the students may think beyond unthinkable and see beyond unseen. As the College is situated in rural area, knowledge is imparted to rural society by adopting innovative methods & techniques which aids in the economics upliftment and well being of the masses.



#### Department of Environmental Sciences

- ✓ The Department of Environmental Sciences was operational in the year 2019 with the establishment of the college only.
- ✓ In the light of the dynamic nature of the discipline besides its tremendous growth in many of its sub-disciplines, the department offers Ability enhancement courses as well as Skill enhancement courses which are designed to impart the practical knowledge of the subject matter.
- ✓ The department has diversified interest in various earth, atmospheric and biological processes. Linkages between Natural Resources and Social as well as environmental issues give an additional dimension to department's interest, making the course relevant. Therefore, the curriculum has components of disciplinary areas such as Ecosystem, Environmental Pollution, Solid Waste Management and environmental hazards and management.



## Aims and Objectives

- ✓ To provide a comprehensive understanding of our environment and provide economical and effective solutions to environmental problems.
- ✓ Sensitize the students towards the need for keeping the environment clean and conserve natural resources
- To develop an aptitude towards science and nature
- ✓ study the impact of environmental pollution on human health
- focuses on learning ecological renewal and pollution control be it in water, soil, or air. Water and wastewater management, solid and hazardous waste management, including radioactive, biological waste management, and environmental hazards.

## **Faculty Profile**



Dr. Anjali Bala, Lecturer Ph.D., UGC NET, JKSET

#### **Academic background:**

- ✓ Ph.D. (Environmental Sciences), Central University of Jammu, J&K (July, 2021)
  - [Thesis title: Chemical Assessment of Groundwater of Jammu Province and its relationship with the Lithology of the area]
- ✓ M.Sc. (Environmental Sciences), Central University of Jammu, J&K (2014-16) [CGPA 8.77 on 0-10 scale]
  - [Dissertation Title: Sea Surface Temperature (SST) Variability Analysis using satellite derived data for Indian Ocean]



#### Journal publications:



- Kouser, B., **Bala, A**., Verma, O., Prashanth, M., Khosla, A., & Pir, R. A. (2022). Hydrochemistry for the assessment of groundwater quality in the Kathua region, Jammu and Kashmir, India. *Applied Water Science*, *12*(7), 1-22.
- Bala, A., Singh, U.K, Mehta, P., Dhar, S. and Pathania, D. (2019). Evaluation of hydrogeochemical processes and chemometrics of the groundwater in the Vijaypur block of Samba district, J&K, India. *International Journal of Higher Education and Research* 9(1), 152-172
- **Bala, A.**, and Mehta, P., (2018). Hydrogeochemical Characterization and evaluation of Groundwater quality in Hiranagar Tehsil of Kathua District, J&K, India. *Vimal Vimarsh*. 1(3), 164-172



#### **Book Publications**

✓ In June 2019, Published a book titled as "Medicinal and aromatic Plant Diversity of Central University of Jammu: A Handbook" as the first Publication of the university for the copyright work L68453/2017.

#### **Book chapters published**

- **▶ Bala, A.**, Mehta, P., and Singh, U.K., (2021) "Water Pollution and Water Crisis". Facets of Environmental Sciences. Shree Publishers and Distributors. pp 30-62. (ISBN: 978-93- 90674-05-3)
- ▶ Bala, A., and Dubey, R., (2021) "Solid waste management and Existing Appropriate Technologies". Agriculture and Forestry: Current Trends, perspective, Issues-IV. Immortal Publications. pp 424-440. (ISBN:978-93-5437-486-9)
- **▶ Bala, A.,** and Dubey, R., (2020) "Impact of Air Pollution and Abatement technologies". Global Environmental Problems. Redshine Publications (ISBN: 978-93-89840-77-3)

#### **Conference Proceedings:**



- ✓ Extended abstract Accepted in National Symposium on Environmental BARC (NSE-20) held during December 13-15, 2018 at IIT Gandhinagar. Gujarat
- ✓ Oral paper presentation in National Seminar on Geology and Climate of Himalayan (NSGCH) organized by Department of Geology, University of Jammu during 15<sup>th</sup> − 16<sup>th</sup> march 2018
- ✓ Oral paper presentation in 14 JK Science Congress organized by University of Jammu during December 20-22, 2019
- ✓ Oral paper presentation in National conference on Climate Change, Societal Consequences and mitigation: Future Vision on the topic Estimation of total Organic Carbon and textural Analysis of Tawi river Sediments in Jammu District held on 26<sup>th</sup> -27<sup>th</sup> April, 2018
- ✓ Poster presentation in 17th Indian Science Communication Congress (ISCC\_2017) held during December 21-22, 2017 in New Delhi, India



## Workshop attended

- ✓ Successfully completed the training course on Ground water Development, Management and Local Issues organized by Central groundwater board (CGWB) from 06-03-2019 to 08-03-2019
- ✓ Successfully completed one week Faculty Development Program on research Methodology by HRDC –Shri Mata Vaishno Devi University, Katra held during December 4 -8, 2017
- ✓ Participated in "one day consultation workshop on Environmental Issues of Jammu and Kashmir: Need for Cooperation" held on 14th January, 2017 by JKENVIS.
- ✓ Participated in two day Workshop on Startup and Incubation held during January 21 and 22, 2019 at JKEDI, Bari Brahmana, Jammu.
- ✓ Successfully completed an online course on "Remote Sensing and GIS application on carbon Forestry" conducted by IIRS during February 16, 2017 to March 10, 2017.
- ✓ Successfully completed the online course on "Global Navigation Satellite System and Geographical Information System" conducted by IIRS during September 17, 2018 to October 26, 2018



#### **IPR Granted:**

• IPR titled as "Ecofriendly Detox Clay Pot (E-DCP)" was granted with copyright registration number L-82402/2019 from Register of copyright, Government of India.

• Govt. of India, Diary No: 9644/2021, titled as 2I's leads to 3<sup>rd</sup> Eye(Innovation + Incubation = Entrepreneurship) FUTURE VISION: ATMANIRBHAR BHARAT

# Teaching Methods Offline/ Online



- Subject books available in the college library
- Marker and White Board Method
- Lecture Method
- Lecture cum Demonstration
- Discussion
- Assigment Project Method
- Multimedia Projector
- Wise app/ Zoom meeting/ whatsapp group/ google classrooms
- Links for National Digital Library are made available to students for easy access of wider choice of resources



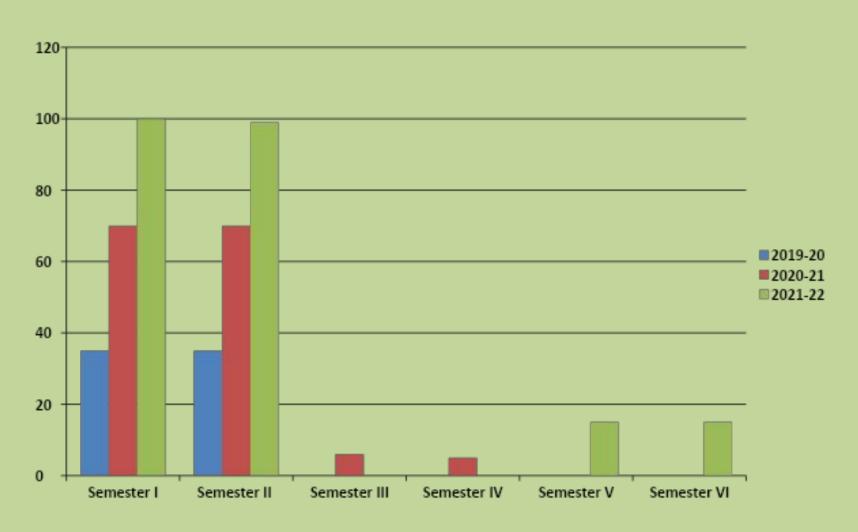
# Courses being taught

Semester	Course Code	Course Title	
1	UESTS 104	The Environment and Ecosystem (AECC)	
II	UESTS 204	Environmental Pollution And Disaster Management (AECC)	
III	UESTS 301	Solid Waste Management (SEC)	
IV	UESTS 401	Environmental Impact Assessment (SEC)	
V	UESTS 501	Environmental pollution and management (SEC)	
VI	UESTS 601	Environmental Hazards (SEC)	

# Number of students enrolled

SEMESTER	2019-20	2020-21	2021-22
SEM I (AECC)	35	70	100
SEM II (AECC)	35	70	99
SEM III (SEC)	-	06	-
SEM IV (SEC)	-	06	-
SEM V (SEC)	-	-	15
SEM VI (SEC)	-	-	15

# Total number of students enrolled





#### **Future Vision**

- ✓ To be a leading and renowned Department for producing graduates
- ✓ through value based quality education with innovative means and collaborative interdisciplinary approaches who can address current and evolving environmental challenges for self—reliance, sustenance and betterment of society
- ✓ To adopt state- of- the- art technologies to optimize use of teaching and research for enhancing knowledge, skills and entrepreneurship amongst the young generations

#### **Departmental Activities**





On 05-06-2020, "World Environment Day" A plantation drive was held in the College by EVS Department. Prof (Dr.) Meeru Abrol Principal GDC Ramgarh, Samba was the chief guest on the occasion. Also a National level online essay writing competition was organized on the topic "Save Environment Save Earth". The first prize was bagged by Aniket Gupta, GDC Udhampur.









To commemorate World that primary goal behind policy. Environment Day, Gort, organizing this event is to economic organized the Door-to- effectively manage waste, assessments. It also covers health. Door Campaign to create debut and materials the legislative and Mr. Fayar general public about waste-security incident, including control, including sweeting. Environmental management includes the amount of waste generated. Dr. Sandeep Kumar made, waste management deals. Yasmeen (Convener youth processes and actions at the outset. Waste the public aware of the withmunicipal solid waste, club! Da Noshika Shama from its inception to its the presentation, and on the environment and industrial commental and Hussain Rather, Masarat final disposal This whole discussion of information human health. He further household activity. He Rashid, Abdul Qayvem event was organized by on sold waste generation, added that the dry and wet further explained the TR's Malla and Ashif Abdullah Department of Punjabi minimization, collection, Proper management of Recycle, Refuse, Reduce, The college is already under the able guidance of separation, treatment and waste in important for Beuse. Repair, Regilt, declared as "No Tobacco

the generated by a homeland regulatory system for waste Department Waste reducing the potential guidelines etc. Kumari, characterization, waste should be separated of Waste Management in Baba

explained that a big part of were

education, reduce the dangerous of tobacco Dr. Radra Rank and effects of such waste on the 2005 Programme Offices.

To commemorate World Environment Day, Govt. Degree College Ramgarh organized the Door-to-Door Campaign to create awareness among the general public about waste management. Waste management includes the processes and actions required to manage waste from its inception to its final disposal. The staff, as well as the students of the college wholeheartedly, participated in this campaign.











To commemorate World Environment Day, Govt. Degree College Ramgarh organized a series of activities viz. Door-to-Door Campaign on 'Waste Management' on 30.05.2022, poster making competition **'Water** on Management' on 02.04.2022 and Cleanliness Drive at Campus on 04.05.2022.





#### GDC Ramgarh organizes one day seminar on Intellectual Property Rights

a person or company and He also shed light on some exist. A dispute may end interacted with each other assets refer to non-physical. The significant violations ages, or cease and desist vote of thanks was delivproperty, including right of of intellectual property con-orders.

Degree College Ramgath, Katgil Campus Khumhtang confuse buyers into think- been defined as ideas. Property Rights. The event Property. There are four or music without authoriza-there is a public willingness argis of Prof. (Dr.) Meeru property rights, including materials even on a photo-property. IPR provide cerlege. Dr. Pinky Rakwal, rights, and trade secrets. Copying another person's inventors or creators of that was delivered by types of intellectual proper- goods without a license to efforts or reputation. In the Prof. (Dr.) Meeru Abrol, ty law to protect the same do so. Since intellectual end an open She said intellectual prop- instance, trademark law said or leased out it offers ined in which besides its are any and all protects a product's name, many protections equal to Prof.Seema Shar associated with whereas copyright law cov- real property ownership. intected against use with- examples of violations of with property confiscation, and out consent. Intampble intellectual property rights, an order of monetary dam. Concluding remarks and

Government degree college Ramgarh organizes one day seminar on Intellectual property rights to educate students about the IPRS, Copyright and patents to be filed for novel ideas











GDC Ramgarh organized Poster making competition on "World Earth Day" NSS Unit (Prabha) of Government Degree College Ramgarh celebrates "World Earth Day "by organizing Poster making competition under the guidance of Dr. Meeru Abrol, Principal of the College. The main objective of the competition was to make youth aware of making healthy environment on the Earth for the betterment of the society and to pay tribute to the Mother Earth. The students were made sensitive about climate change and global warming.





On 18-08-2020, Tree Plantation Drive was conducted by Red Ribbon Club of the College in collaboration with Social Forestry Department, J & K. The officials present on the occasion were Monider Pal Gupta, Regional Director, Department of Social Forestry; Hitashi Sharma, DFO Jammu, Department of Social Forestry; Romesh Chander Sharma, Range Officer Vijaypur; S. Amrik Singh, Block, Vijaypur, Samba along with Principal of college Prof.(Dr.) Meeru Abrol and staff of the college.





On 30-09-2019, a cleanliness drive to keep the campus and surroundings neat and clean was conducted under the guidance of Dr. Sandeep Kumar, Convener, College Development Committee. A pledge was taken by staff and students for the cause.

#### Glimpse of Press Release for various Activities



#### GDC Ramgarh organized a One Day Workshop on the topic "Rural Entrepreneurship Development Programme."



#### NIN NEWS SERVICE RAMGARH, FEB 01

Govt. Degree College Prof. Ramgarh in collaboration Assistant with 'Mahatma Gandhi Department of Punjabi. 'Rural Entrepreneurship manufacturing business participated Prof. (Dr.) Meeru Abrol, performed by villagers cleared their doubts. was the chief Guest on the through creative ideas in Dr. Sandeep occasion. Mrs. Shivali her Presentation. She Assistant Person in the workshop, to become self-reliant,

The Program began with Prof. (Dr.) Meeru Abrol, the welcome address by Principal of the College, Risha Kumari, stressed upon the need for Professor, the adoption of such methodology that helps in National Council of Rural Mr. Shivali Choudhary, promoting entrepreneurship Education", Department of Resource person for the opportunities in manufacturing Higher Education, Ministry workshop elaborated the and marketing rural products. of Education, Government challenges of Rural A large number of of India organized a One entrepreneurship, participants attended the Day Workshop on the topic management, small scale workshop. Students actively Development Programme." ideas and various activities interactive session and

Choudhary, Coordinator acquainted the students Department of Statistics, REDC UT of Jammu- with the various Rural provided the technical Kashmir, was the Resource Entrepreneurship programs assistance to make the event



