

# DEVASWOM BOARD COLLEGE THALAYOLAPARAMBU

(Affiliated to Mahatma Gandhi University, Kottayam)

### **CRITERION III**

Research, Innovations and Extension

The National Assessment and Accreditation Council
(NAAC)
February 2024



### 3.2.1 INNOVATION ECOSYSTEM: SUPPORTING DOCUMENTS

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### CREATING AN ATMOSPHERE FOR INNOVATIONS

#### SIGNING OF MoU WITH MG UNIVERSITY

In a significant move towards nurturing innovation and fostering entrepreneurial spirit, Devaswom Board College and Mahatma Gandhi University (M.G. University) have signed a Memorandum of Understanding (MoU) on 22<sup>nd</sup> January 2020. The handover of the MoU to the Principal Dr. R Anitha took place during the Global Academic Carnival, EUNOIA 2023 organized by MG University. Teachers as well as students from the college participated in the event. The MoU aims to create a collaborative platform that will support and promote start-up ventures among students and faculty members while fostering an environment conducive to innovation within the academic setting. Through this MoU, they commit to provide students and faculty members with the necessary resources, guidance, and networking opportunities to translate their innovative ideas into viable business ventures.

One of the key objectives of the MoU is to establish incubation centres and innovation labs in the College, facilitated and supported by M.G. University. These centres will serve as hubs for ideation, collaboration, and experimentation, equipped with state-of-the-art facilities and mentorship programs to nurture entrepreneurial talent. Furthermore, the MoU outlines plans for joint workshops, seminars, and training sessions conducted by industry experts and seasoned entrepreneurs to impart practical knowledge and skills essential for start-up success.





MoU handover ceremony

#### YOUNG INNOVATORS PROGRAM- ORIENTATION

Business Innovation and Incubation Centre organized an online webinar, "Orientation on Young Innovators program" on 12th May 2023 for encouraging students to participate in the Young Innovators Program (YIP). YIP is a new project of Kerala Development and Innovation Strategic Counsel (K-DISC) that aims to empower future innovators to innovate new products, services, or models to meet emerging requirements or existing marketing needs of the society more effectively through specially designed challenges. In order to create awareness on this project, BIIC arranged an orientation session. The resource person was Mr. Dipin V S, District coordinator of K-DISC. He explained about this project and oriented students to participate in an idea fest conducted by K-DISC. The Principal Dr. R. Anitha facilitated the program and more than 80 students participated.

Second session was conducted on 30<sup>th</sup> June 2023, and was handled by Mr. Bittet Binoy, YIP intern. He helped students to register for the Young Innovators Program and motivated students to actively participate in this idea fest. The program was felicitated by Dr. R. Anitha, Principal, Devaswom Board College and Dr. Remalekshmi Pothuval, co-ordinator BIIC. Dr. Jicy N., Assistant professor, Department of Mathematics felicitated the gathering. Around 40 students actively participated and more than 30 students registered for the event.





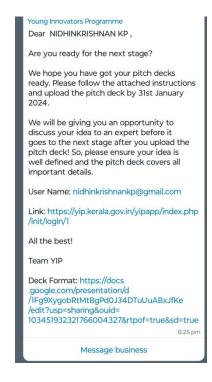


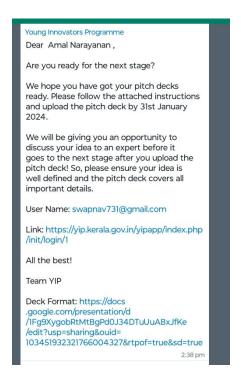


#### PARTICIPATION IN YIP

Ten teams participated in YIP 5.0 and submitted their innovative ideas. Out of these, five groups have been shortlisted at the district level and are now preparing to advance towards the next stage.

Category 2 Institutions: ( Arts and Science Colleges, Business Schools, Engineering Colleges, University  Departments and Research Institutions)		
SI No	Institution Name	No of Teams Shortlisted
1	Amal Jyothi College of Engineering	131
2	Saintgits College of Applied Sciences	40
3	St. Dominics College Kanjirapally	36
4	Bishop Chulaparambil Memorial College Kottayam	32
5	Mangalam College of Engineering	24
6	SAINTGITS COLLEGE OF ENGINEERING	19
7	University College of Teacher Education Paippad	17
8	Kuriakose Elias College	16
9	St. Josephs College of Engineering and Technology Palai	9
10	Gregorian institute of technology	8
11	KRISTU JYOTI COLLEGE OF MANAGEMENT AND TECHNOLOGY	8
12	NSS Training College, Perunnai, Changanacherry	8
13	St. Thomas College of Teacher Education, Pala 686 575	7
14	Rajiv Gandhi Institute of Technology	6
15	SREE SABAREESA COLLEGE	6
16	DEVASWOM BOARD COLLEGE THALAYOLAPARAMBU	5
17	Mar Augusthinose College Ramapuram	5
18	School of Artificial Intelligence and Robotics	5
19	BASELIUS COLLEGE	4
20	Deva Matha College Kuravilangad	4
21	School of Chemical Sciences, MGU	4
22	Bishop Kurialacherry College for Women	3
23	COLLEGE OF TEACHER EDUCATION KANJIRAPALLY	3
24	Government Commercial Institute	3
25	School of Biosciences	3
26	TOMS College of Engineering And Polytechnic	3
27	ASSUMPTION COLLEGE	2
28	School of Physical Edn. & Sports Sciences	2
29	St. Thomas College Palai	2
30	College of Applied Science (IHRD), Njeezhoor P.O., Kaduthuruthy	1
31	Government Polytechnic College Pala	1
32	GOVERNMENT POLYTECHNIC COLLEGE KADUTHURUTHY	1
33	KURIAKOSE GREGORIOS COLLEGE	1
34	M E S GOLDEN JUBILEE COLLEGE KOTTAYAM	1
35	M.E.S College, Erumeli 686 509	1
36	School of Computer Sciences, MGU	1
	Total	422





### ENTREPRENEURSHIP DEVELOPMENT

Entrepreneurship development is the process of enhancing the entrepreneurial knowledge and skills via structured training programmes. It deals with the study of entrepreneurial behaviour, dynamics of business, its development and expansion. It encourages innovation by bringing new ideas, products, and services to the market and contributes to the overall social change by developing novel products or services. It helps in alleviating poverty, promotes economic growth, creates jobs and encourages capital formation. Through ED club the institution nurtures a culture of entrepreneurship among students and faculty. A plethora of events are organized in the college to inculcate this culture among students.

## ONLINE WORKSHOP TOPIC: HANDICRAFT ITEMS FROM WASTE

NSS unit of Devaswom Board College organized an online workshop on the topic 'Handicraft Items from Waste' in association with ED club on 5<sup>th</sup> June 2021. The speaker of the session was Mr. Shobin Shaji, 3<sup>rd</sup> DC Botany student from our college. Waste management is a big concern in the present scenario. It includes the processes and actions required to manage waste from its inception to its final disposal. This includes the collection, transport, treatment and disposal of waste, together with monitoring and regulation of the waste management process and waste-related laws, technologies and economic mechanisms. The speaker demonstrated the reuse of some common waste as decorative items at home. He trained students to make flower, table lamp, showpiece, flower vase etc out of used bottles and polythene covers. Students were able to follow the instructions and conceive the idea of 'best out of waste'. 45 students attended the session.



Brochure SEMINAR

#### **TOPIC: WOMEN ENTREPRENEURSHIP**

A seminar was organised by KSWDC Women cell in association with ED club on the topic "Women entrepreneurship" on 22<sup>nd</sup> February 2023. The resource person was Ms. Maya Devi, Director, Royal School of English, Thalayolaparambu. She is a successful entrepreneur in our locality. The speaker gave valuable insights on the role of confident, creative and innovative women as successful entrepreneurs who not only desire economic independence but also simultaneously create employment opportunities. 50 participants attended the seminar.



#### **Brochure**



Ms. MayaDevi delivering her insights

### IPR CELL AND ACTIVITIES

## SEMINAR TOPIC: IPR, A PERSPECTIVE ON ITS RELEVANCE TO NATION BUILDING

An IPR cell was formally established in the college and inauguration of the same was done on 27<sup>th</sup> March 2019. In connection with this, a seminar on 'IPR, A perspective on its relevance to nation building' was organized by the IQAC for UG and PG students. Smt. Saritha KM, IQAC Member and Assistant Professor, Dept of Chemistry welcomed the gathering. The inaugural address was delivered by Dr. R. Anitha, Principal, Devaswom Board College, Thalayolaparambu. She highlighted the significance of IPR citing a few examples. Dr. Lalimol S, HoD, Dept of Malayalam offered felicitations. Dr. Deepa CS, IQAC Coordinator, Devaswom Board College Thalayolaparambu expressed her sincere gratitude to all the guests who partook in the function.

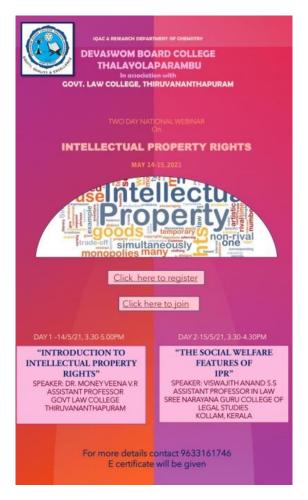
The technical session was led by Adv. Mathew John, Advocate, High Court of Kerala. His discussion was mainly on the basics of IPR and he introduced different aspects of IPR like trademarks, plagiarism, patents, geometrical indication, copyrights, designs, plant breeders rights etc. He also briefed about different courses students can choose in the field of IPR. The session concluded with an open forum for questions. 52 participants attended the session.



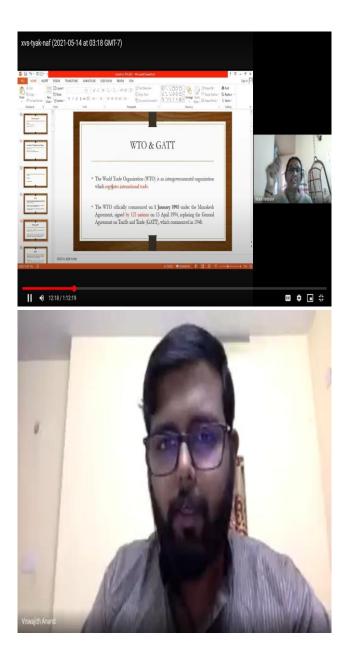
Dr. R Anitha and Adv. Mathew John addressing the audience

## WEBINAR TOPIC 1: INTRODUCTION TO INTELLECTUAL PROPERTY RIGHTS TOPIC 2: THE SOCIAL WELFARE FEATURES OF IPR

A two-day webinar was organized by IQAC, Devaswom Board College on 14<sup>th</sup> & 15<sup>th</sup> May 2021 in association with the Department of Chemistry, on the topics "Introduction to Intellectual Property Rights" and "The Social Welfare features of IPR" which were delivered by Dr. Money Veena VR of Govt Law College, Thiruvananthapuram and Mr. Viswajith Anand SS of SN College of Legal Studies, Kollam respectively. At a time, when intangible creations of the human intellect are being recognized as a property, such webinars are of utmost importance. The speakers gave a very good insight into the nuances of intellectual property and also discussed Copyrights, Trademarks, Patents, Trade Dress and Trade Secrets citing examples. The direct influence of IPR on society and its relationship to social welfare was also discussed. The webinars were quite engaging. 68 and 75 participants attended the sessions respectively.



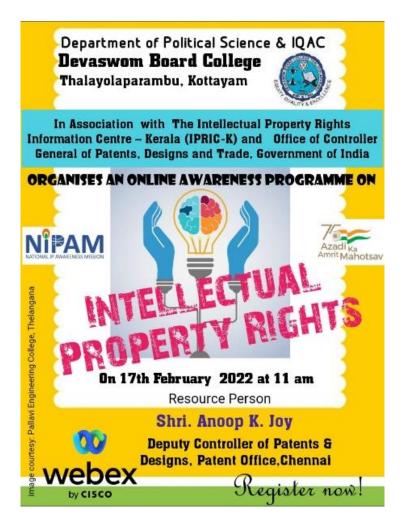
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Dr. Money Veena VR and Mr Viswajith Anand delivering the talks

## WORKSHOP TOPIC: INTELLECTUAL PROPERTY RIGHTS AWARENESS PROGRAM

Department of Political Science, Devaswom Board College, Thalayolaparambu in association with IQAC and IPRIC-K, Government of India organized an Intellectual Property Rights Awareness Program on 17<sup>th</sup> February 2022. Around 230 students participated. Shri. Anoop K Joy, Deputy Controller of Patents and Designs, Patent Office, Chennai lead the session. The session was a very informative to the students. They could get a clear understanding on intellectual property rights, patents, trademarks, copyrights etc. Various aspects of IPR and the need to create awareness of those rights was also discussed.



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### INDIAN KNOWLEDGE SYSTEMS (IKS)

The Indian Knowledge System (IKS) holds immense significance in higher education, offering a wealth of benefits that enrich the learning experience and contribute to the overall development of individuals and society. It aids holistic development. While reviving the vast repository of ancient knowledge, these courses can instil pride in our youth with their inclusion in mainstream education, The Indian Knowledge System (IKS) holds immense significance in higher education, offering a wealth of benefits that enrich the learning experience and contribute to the overall development of individuals and society. The institution conducts various seminars and workshops on topics like Ayurveda, Yoga and traditional medicine to inculcate the values of Indian Knowledge systems among students.

### SEMINAR TOPIC: YOGA

In collaboration with the Nehru Yuva Kendra, Youth Welfare Society Vaikom, Ayush Ayurveda Primary Healthcare and Govt. Homeo Dispensary Vaikom, Department of English organized a One-day Seminar entitled 'Yoga' on June 20<sup>th</sup> 2018. Kaduthuruthy Block Panchayat President Smt. Annamma Raji inaugurated the session and academic sessions were handled by Dr. Suman Babu (Ayurveda) and Dr. K Moly (Homeo). A demonstrative and informative session was led by Yogacharya Sri. Shain Dominic. The students enthusiastically participated in the Yoga seminar. 35 participants attended.



The audience eagerly listening to the session on Yoga

# WEBINAR TOPIC : RAMAYANATHILE STHREE KADHAPAATHRANGAL (FEMALE CHARACTERS IN RAMAYANA)

PG Department of Malayalam in association with IQAC organized the 12<sup>th</sup> webinar in the Medha webinar series on 3<sup>rd</sup> August 2020. The session entitled '*Ramayanthile sthree kadhapaathrangal*' (Female characters in Ramayana) was handled by Dr. G. Poornima (Assistant Professor, Dept. of Sanskrit, Sree Sankaracharya Sanskrit University, Kalady). The webinar provided inspiration to delve deeper into Indian culture and discover levels of women's resistance. The session evaluated the female characters in Ramayana and their crucial role in the epic. The webinar was followed by an interactive session. The participants interacted with the speaker effectively. 88 participants attended the webinar.



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## WEBINAR TOPIC: FAMILIARISING THE PLANTS USED IN THE PREPARATION OF MEDICINAL PORRIDGE OR KARKIDAKA KANJI

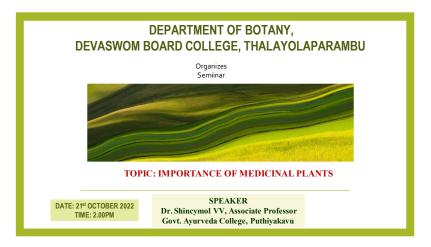
A webinar was conducted by Department of Botany on the topic "Familiarising the plants used in the preparation of Medicinal Porridge or Karkidaka Kanji" on 15<sup>th</sup> August 2020. The speaker of the session was Prof. P. Sreekumari, Professor and Former Head of the Department of Botany. The speaker gave an elaborate account of the medicinal plants used in the preparation of medicinal kanji. She explained the significance of use of each plant, familiarized the plants with appropriate images and descriptions and also explained the mode of preparation of 'Karkidaka kanji'. An account of the beneficial effect of this medicinal porridge was also given.



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### SEMINAR TOPIC: IMPORTANCE OF MEDICINAL PLANTS

Department of Botany organized a state level seminar on the topic 'Importance of medicinal plants' on October 21<sup>st</sup> 2022. The speaker of the session was Dr. Shincymol VV, Associate Professor, Govt. Ayurveda College, Puthiyakavu. Medicinal plants have always been integral to diverse cultures for centuries, offering a treasure trove of natural remedies, therapeutic compounds and potential cures for various ailments. The session gave a clear understanding about the medicinal potential of the plants around us and importance of preserving these botanical resources for future generations. The seminar also helped to create awareness about the use of these plants in treating several chronic diseases as well as the need to conserve them in their natural habitat by protecting our environment. 45 participants attended the seminar.



#### **Brochure**



Dr. Shincimol VV delivering the talk on 'Importance of medicinal plants'

## ESTABLISHMENT AND MAINTENANCE OF NAKSHATHRAVANAM (STAR GARDEN) AND HERBAL GARDEN

'Nakshathravana' is an ancient concept given by Hindu sages which addresses the present-day challenges, offering solutions like enriching biodiversity, conserving native, vulnerable plant species with medicinal and healing properties, religious and spiritual significance, supports local fauna and encourages afforestation. Department of Botany and Department of Malayalam jointly established 'Nakshathravanam' (star garden)- a collection of 28 plants/trees which are represented by the 28 stars. This is maintained by the students who enthusiastically participate in this biodiversity conservation process.

Herbal gardens serve as repository of traditionally used medicinal plants which are often used to combat many dreadful diseases. In view of this, a herbal garden was established and maintained by the students and faculty of Department of Botany. The herbal garden at our college harbours many valuable medicinal plants used for a multitude of ailments in the traditional system of medicine (Ayurveda).





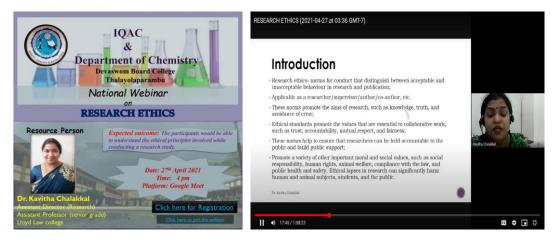
Students involved in the maintenance of *Nakhsthravanam* and herbal garden at the college

### FOSTERING RESEARCH

Fostering research among faculty and students is a crucial endeavour of our College that requires a combination of creativity, support, and collaboration. As curiosity is the driving force behind meaningful research, The faculty encourage curiosity among students by creating an environment that values questioning, exploration, and the pursuit of knowledge. Students have access to laboratories, equipment and libraries. The College strives for fostering interdisciplinary collaboration by organizing webinars, seminars and workshops where experts share their insights, potentially leading to innovative breakthroughs.

### WEBINAR TOPIC: RESEARCH ETHICS

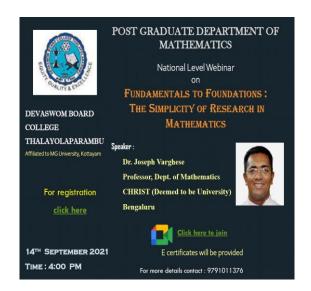
A one-day webinar was conducted by IQAC on the topic 'Research Ethics' in association with the Department of Chemistry on 27<sup>th</sup> April 2021 with Dr. Kavitha Chalakkal from Lloyd Law College as resource person. The speaker highlighted the application of fundamental ethical principles to research activities. She discussed the design and implementation of research, emphasized on the need for respect towards society and others, stressed on the use of resources and research outputs, warned about scientific misconduct and enlightened on the regulation of research. A total of 40 participants attended the webinar.



Dr. Kavitha Chalakkal during the talk

## NATIONAL WEBINAR TOPIC: FUNDAMENTALS TO FOUNDATIONS: THE SIMPLICITY OF RESEARCH IN MATHEMATICS

PG Department of Mathematics organized a National webinar on 'Fundamentals to Foundations: The Simplicity of Research in Mathematics' on 14<sup>th</sup> September 2021. Dr. Joseph Varghese, Professor, CHRIST (Deemed to be) University, Bengaluru was the resource person. He explained the simplicity of doing research in Mathematics through practice, memory and creativity and discussed about the methods of doing research. 75 participants from various parts of India participated in the webinar.

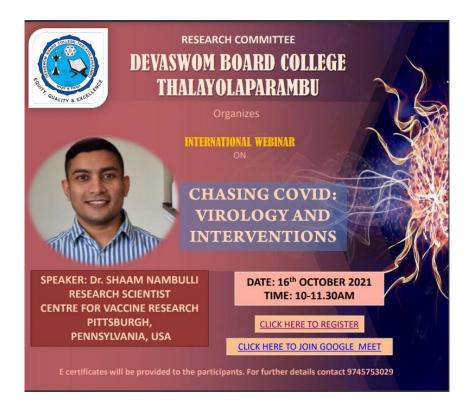


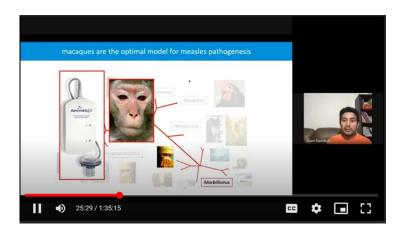


Dr. Joseph Varghese delivering the talk

### INTERNATIONAL WEBINAR TOPIC: CHASING COVID: VIROLOGY AND INTERVENTIONS

Research Committee, Devaswom Board College, Thalayolaparambu organized an International webinar on the topic 'Chasing covid: Virology and interventions' on 16<sup>th</sup> October 2021. The speaker of the session was Dr. Shaam Nambulli, Research Scientist, Centre for vaccine research, Pittsburgh, Pennsylvania, USA. The session was handled excellently by the speaker who elaborated about the various strategies adopted for eradicating Covid pandemic. He specifically dealt with the interventions and research carried out at the Department of Virology, USA. The webinar was packed with information and the speaker enlightened the attendees with his excellent communication and presentation skills. 82 participants attended which included faculty and students.





## INTERNATIONAL WEBINAR TOPIC: NON- PHARMACOLOGICAL INTERVENTIONS FOR THE TREATMENT OF CARDIOVASCULAR DISEASES

Research Committee and Department of Botany, jointly organized an International webinar on the topic 'Non- pharmacological interventions for the treatment of Cardiovascular diseases' on 12<sup>th</sup> February 2022. The speaker of the session was Dr. Reena Bapputty, Senior Research associate, Department of Pediatrics, Case Western Reserve University, Cleveland USA. The speaker gave an understanding on the different interventions for treating cardiovascular diseases which is a major cause for death globally. The session was quite informative and gave an idea of the importance of maintaining cardiovascular health by lifestyle changes. 84 participants attended the international webinar.



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Dr. Reena Bapputty delivering her talk on cardiovascular diseases

### WORKSHOP RESEARCH METHODOLOGY

The PG Department of English conducted a Research Methodology Workshop for the students on 29th July 2022. Dr. Maria Lisa Mathew, Assistant Professor, Department of English, Fatima Mata College, Kollam was the resource person. Research forms the cornerstone of knowledge advancement and innovation and thus understanding the methodologies employed in this process is crucial. The resource person elucidated on the essential tools, techniques and approaches required for conducting effective research in the realm of English studies. The various methodologies, critical analysis and scholarly writing styles that aid in research were also discussed in detail. The session was attended by 40 students.



Dr. Maria Lisa Mathew interacting with students during the workshop

### INTERNATIONAL WEBINAR TOPIC: HINDI HAMARI ASMITHA HINDI HAMARA MAAN

In collaboration with Vishwa Hindi Sangathan New Delhi, Department of Hindi organized an International webinar on 14<sup>th</sup> September, 2022, to commemorate national Hindi Day, promoting the significance of Hindi language and culture, bringing together scholars and students to discuss various aspects of Hindi language, literature, and culture. The webinar served as a platform for intellectual discourse and knowledge sharing. The webinar aimed to promote the significance of the Hindi language, its rich cultural heritage and literature globally and foster cultural exchange among participants. 150 participants attended the webinar.



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Report in print media

### INTERNATIONAL WEBINAR TOPIC: VAISHVIK PARIDRISHYA MEIN SAMRASTA KI SAMVAHAK HINDI

In collaboration with Vishwa Hindi Sangathan, the Department of Hindi conducted an International webinar on 10<sup>th</sup> January, 2023, to celebrate Vishva Hindi Diwas, focusing on the global reach and influence of Hindi language. The seminar delved into the diverse facets of Hindi's expansive influence, exploring its cultural, linguistic and socio-economic significance across the world. 120 participants attended the International webinar.



**Brochure of the webinar** 



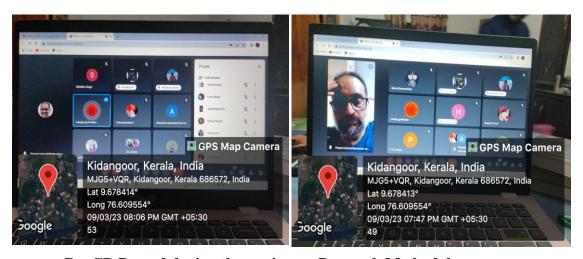
Report of the webinar in print media

### MEDHA WEBINAR TOPIC: RESEARCH METHODOLOGY CONCEPTS AND POSSIBILITIES

As part of the Medha Webinar Series, the PG Department of Malayalam organized a webinar on the topic "Research methodology concepts and possibilities" on 9<sup>th</sup> March 2023. The speaker of the session was Dr. C R Prasad, Professor, University of Kerala. He elucidated on the process of research in Malayalam literature and its various stages. The class concluded with a Q & A session wherein students asked questions on relevant topics chosen for their UG and PG projects. The speaker answered the queries by quoting examples and also pointed out the possibilities and issues regarding the topics chosen by the students. The session was highly beneficial to the students. 110 participants attended the webinar.



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Dr. CR Prasad during the session on Research Methodology